

# State Significant Development Application SSDA 7317 Environmental Impact Statement

## Australian Technology Park, Eveleigh

Multi-building Redevelopment including Commercial Office, Retail and Community Uses and Upgrades to the Public Domain



Submitted to The Department of Planning and Environment  
On behalf of Mirvac Projects Pty Ltd

December 2015 ■ 15756

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18/12/2015

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18/12/2015

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Landowner's consent



# Statement of Validity

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## Development Application Details

Applicant name	Mirvac Projects Pty Ltd
Applicant address	Level 26, 60 Margaret Street Sydney NSW 2000
Land to be developed	Australian Technology Park, Eveleigh
Proposed development	Redevelopment of Lots 8, 9 and 12 (development zones) and Lots 10 and PT 4007 (public domain works) within the Australian Technology Park (ATP), Eveleigh as described in Section 3.0 of this Environmental Impact Statement

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## Prepared by

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Qualifications	BRTP (Hons) MPIA
Address	Level 7, 77 Berry Street, North Sydney
In respect of	State Significant Development Application – Redevelopment of the Australian Technology Park (ATP)

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## Certification

I certify that I have prepared the content of  
this EIS and to the best of my knowledge:

- it is in accordance with Schedule 2 of the  
Environmental Planning and Assessment  
Regulation 2000;
- all available information that is relevant to  
the environmental assessment of the  
development to which the statement  
relates; and
- the information contained in the  
statement is neither false nor misleading.

Signature

Name Daniel Howard

Date 18/12/2015

Signature

Name Alexis Cella

Date 18/12/2015

# Executive Summary

## Purpose of this report

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning and Environment on behalf of Mirvac Projects Pty Ltd (Mircac) in support of a State Significant Development Application (SSDA) for the redevelopment of various lots within the Australian Technology Park (ATP), Eveleigh.

This SSDA will encompass the detailed development of the site, including commercial, retail and community uses across three new buildings, together with associated car parking, landscaping, public domain improvements and infrastructure augmentation. It is noted that this SSDA does not propose any works to the Locomotive Workshop.

## Background

Australian Technology Park (ATP) has been continuously developed since its establishment in 1996, founded on a vision to sustain a thriving, technology-focused, growth-oriented business park producing leading products and services. In November 2015, Mirvac was announced by Urban Growth Development Corporation (UGDC) as the successful party in securing ownership and redevelopment rights for the ATP precinct, following an Expression of Interest (EOI) and an Invitation to Tender (ITT) process which commenced in 2014.

This SSDA commences the next phase of urban regeneration for ATP and Mirvac will actively continue this process which has been ongoing for the past 15 years, through new employment opportunities. Additional development phases of the Eveleigh precinct and former railway facilities are proposed over the coming years, which will in turn support and be supported by this phase of development at ATP. This application will fulfil the NSW Government's long held vision for the ATP as a genuine world class technology and business centre.

## Development Site

The development site, applicable to this SSDA comprises the following allotments:

- Lot 8 in DP 1136859 (Proposed Community Building);
- Lot 9 in DP 1136859 (Proposed Building 1);
- Lot 10 in DP 1136859 (Existing Channel 7 / Media City Building & Surrounds);
- Lot 12 in DP 1136859 (Proposed Building 2); and
- PT 4007 in DP 1194309 (Public Domain and Streets).

## Proposed Development

- Site preparation works, including demolition and clearance of the existing car parking areas/ancillary facilities, excavation and remediation;
- Construction and use of three (3) new buildings for mixed commercial, retail and community purposes, which include:
  - Building 1, nine (9) storeys (excluding plant) commercial office building, with ground level retail and childcare, comprising a total of 46,832m<sup>2</sup> GFA;
  - Building 2, seven (7) storey (excluding plant) commercial office building, with ground level retail including supermarket, comprising a total of 56,668m<sup>2</sup> GFA;

- Community Building, four (4) storey (excluding plant) multi-purpose building including commercial office, community office, childcare, retail and gym uses, comprising a total of 3,911m<sup>2</sup> GFA;
- Provision of car parking within Buildings 1 and 2, accessed from Central Avenue, providing 706 car spaces, motorcycle spaces, service / courier spaces, and 606 secure bicycle spaces over the three buildings;
- End of trip facilities (including changing rooms, lockers, showers and toilets) within Buildings 1, 2 and the Community Building;
- Fit out and use of the childcare centres and gym floorspace;
- Significant public domain improvement works including: roadway resurfacing/reconfigurations, enhanced streetscapes, landscaping upgrades/plantings and public furniture, lighting and interpretive heritage/art at various locations within ATP; and
- Extension and augmentation of physical infrastructure / utilities for the development, including provision of new substations.

## Environmental Impact

This EIS provides an assessment of the environmental impacts of the project in accordance with the Secretary's Environmental Assessment Requirements (SEARs) and sets out the undertakings made by Mirvac Projects Pty Ltd to manage and minimise potential impacts arising from the development (refer to Section 6.0). Key environmental assessment considerations identified include, amongst others:

- Built form and urban design;
- Overshadowing and visual appearance;
- Traffic generation, car parking requirements and pedestrian safety;
- Heritage and archaeology;
- Construction noise and vibration;
- Waste;
- Remediation; and
- Structural impacts.

All identified impacts are addressed in this EIS and are capable of being ameliorated through the implementation of appropriate mitigation measures outlined in Section 7.0.

## Conclusion

The EIS has addressed the issues outlined in the SEARs and accords with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* with regards to consideration of relevant environmental planning instruments, built form and design excellence, social and environmental impacts including heritage, traffic, noise, construction impacts and stormwater management.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified.

Given the planning merits and the significant public benefits associated with the proposed development, it is recommended that this application be approved.

## 1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the NSW Department of Planning and Environment in support of a State Significant Development Application (SSDA) for the redevelopment of Lots 8, 9 and 12 (substantial development zones) and Lots 10 and PT 4007 (public domain works) within the Australian Technology Park (ATP), Eveleigh.

This SSDA will encompass the detailed development of the site, including commercial, retail and community uses across three new buildings, together with associated car parking, landscaping, public domain improvements and infrastructure augmentation. It is noted that this SSDA does not propose any works to the Locomotive Workshop.

In 2014, the NSW Government resolved to offer development sites within ATP for sale through a selective tender process conducted by UrbanGrowth NSW Development Corporation (UGDC). Mirvac Projects Pty Ltd (Mircvac) was named as the successful party to gain ownership and development rights of the precinct in November 2015. This SSDA commences the next phase of urban regeneration for ATP and Mirvac will actively continue this process which has been ongoing for the past 15 years, through new employment opportunities.

The ATP Site is located within the Redfern Waterloo precinct which is identified as a State Significant Site in Schedule 2 of *State Environmental Planning Policy (State and Regional Development) 2011*. As the proposed development will have a capital investment value of more than \$10 million it is declared to be State Significant Development (SSD) for the purposes of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The report has been prepared by JBA on behalf of Mirvac Projects Pty Ltd, and is based on the Architectural Drawings provided by FJMT and Sissons Architects and other supporting technical information appended to the report (see Table of Contents).

This report describes the site, its environs and the proposed development, and provides an assessment of the proposal in terms of the matters for consideration under Section 79C(1) of the EP&A Act.

This EIS has been prepared in accordance with the requirements of Part 4 of the EP&A Act, Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation), and the Secretary's Environmental Assessment Requirements (SEARs) of the Department of Planning and Environment for the preparation of the EIS, which are included at **Appendix A**. This EIS should be read in conjunction with the supporting information and plans appended to and accompanying this report.

## 1.1 Overview of Proposed Development

This application, being SSDA 7317 will encompass the detailed development of the site for the construction of three buildings, two being primarily used of collaborative office and technology uses and one mixed-use community-focused building, with heights of the buildings varying between 4, 7 and 9 storeys.

More specifically, this SSDA seeks approval for the following components:

- Site preparation works, including demolition and clearance of the existing car parking areas/ancillary facilities and excavation;
- Construction of a 9 storey building within Lot 9 (Building 1), comprising of parking, retail, commercial and childcare uses;
- Construction of a 7 storey building within Lot 12 (Building 2) comprising of parking, retail and commercial uses;
- Construction of a 4 storey community building within Lot 8 (Community Building) comprising of gym, retail, community office, commercial and childcare uses;
- Extensive landscaping and public domain improvements throughout the precinct in PT 4007 and Lot 10; and
- Extension and augmentation of physical infrastructure/utilities as required.

## 1.2 Background to the Development

Australian Technology Park (ATP) has been continuously developed since its establishment in 1996, founded on a vision to sustain a thriving, technology-focused, growth-oriented business park producing leading products and services.

In November 2015, Mirvac was been announced by UGDC as the successful party in securing ownership and redevelopment rights for the ATP precinct, following an Expression of Interest (EOI) and an Invitation to Tender (ITT) process which commenced in 2014.

Mirvac has also secured the Commonwealth Bank of Australia (CBA) as an anchor tenant for the development and intends to immediately commence the urban regeneration of this precinct through the lodgement of this SSDA. CBA's commitment to the precinct is in the form of one of the largest commercial leasing pre-commitments in Australian history, occupying circa 95,000m<sup>2</sup> of commercial, retail and community NLA, which will house circa 10,000 technology focused staff by 2019 and 2020.

Mirvac's redevelopment goes well beyond the development of the three development lots, as it includes the regeneration of the public domain within ATP, the addition of retail tenancies to activate the precinct and also the provision of community facilities such as a community centre, a gym and 2 x 90 place child childcare facilities (as further detailed in Section 3.0).

This SSDA commences the next phase of urban regeneration for ATP and Mirvac will actively continue this process which has been ongoing for the past 15 years, through new employment opportunities. Additional development phases of the Eveleigh precinct and former railway facilities are proposed over the coming years, which will in turn support and be supported by this phase of development at ATP.

## 1.3 Objectives of the Development

The following strategic objectives have been developed to guide the implementation of this SSDA:

- Deliver world-class working, learning, training and collaboration space for the anchor tenant of CBA;
- Support the NSW Government's long term vision and commitment to deliver on the site's technology employment focus;
- Increase the portfolio of businesses and land uses within ATP and reposition the precinct as one of Australia's leading diversified technology and knowledge parks;
- Demonstrate excellence in design and environmental sustainability;
- Enhance connectivity around and through the Precinct and optimise the quality of the public domain;
- Facilitate high levels of public transport usage for workers and visitors of the precinct;
- Maximise the direct and indirect economic benefits to NSW from the project;
- Deliver a rejuvenated ATP precinct that preserves and embraces the site's rich heritage;
- Create a more vibrant and activated precinct that provides a range of day to day services and offerings for employees, visitors and the local community; and
- Explore opportunities to partner with University of Sydney to deliver new creative and digital industries that promote a positive economic impact for the City.

## 1.4 Analysis of Alternatives

### 1.4.1 Strategic need for the proposal

The NSW Government recognises that the ATP is presently underdeveloped and wishes to unlock the social and economic benefits that would arise from releasing land within the ATP precinct for redevelopment. Key strategic drivers for the continued rejuvenation of the ATP precinct are as follows:

- Proximity to a diverse range of frequent public transport services;
- Proximity to the Sydney CBD;
- Provide a significant uplift in the employment capacity of the land which will contribute to meeting the increasing target of new jobs under *A Plan For Growing Sydney*;
- Allow the land uses to contribute to and support Sydney's Global Economic Corridor;
- Increase the provision of retail, child care and community facilities within ATP to cater for the day to day needs of workers and surrounding residents;
- Facilitate development which will contribute to the ongoing retention and upgrade of items of State heritage significance within ATP; and
- To allow ATP to prosper through the augmentation of professional employment, which will improve the positioning of ATP as a place of choice to conduct high-technology and knowledge-based business.



### 1.4.2 Alternative Options

Three options are available to Mirvac in responding to the identified need for redevelopment and enhancement of the ATP facilities.

#### Do Nothing

The 'do nothing' option, would result in the car parking areas and broader ATP facilities unchanged and/or undeveloped. Sydney's positioning as an innovative global city and appeal as a suitable place for commercial investment in contemporary high technology business facilities would diminish, to the detriment of the locality and the wider NSW and Australian economy.

If this option was selected, the significant benefits in creating a substantial new employment generator on an underutilised site on the periphery of the CBD would not materialise. The NSW State Government's long term vision for ATP would also not be realised.

#### Provide new facilities in an alternative location

The ATP site is unique in its capacity to facilitate a commercial campus style redevelopment of considerable scale for CBA.

CBA employs over 44,000 staff and is Australia's second largest employer with a number of employment hubs throughout Sydney and other capital cities. CBA requires large development sites capable of providing broad building footprints to support modern collaborative workplaces. CBA has recently provided new accommodation within the Sydney CBD at such locations of Darling Quarter and new facilities at Darling Square will shortly commence construction. In addition, CBA already occupies other campuses in Olympic Park and Parramatta.

The ATP site is favoured as it is well positioned as an expanding technology hub and which is well connected to growing population sources and significant knowledge-based industries such as universities and research facilities.

There are very few other consolidated sites of sufficient size, with proximity to the Sydney CBD and with such extensive and frequent public transport options to accommodate the required facilities of CBA within the central-Sydney area or surrounds. To this end ATP is preferred by CBA and is evidenced by the signed Agreement for Lease with Mirvac to produce these facilities by 2019 and 2020.

#### Provide an alternative proposal within ATP

Mirvac has secured ATP development rights from UGDC from a short-list of potential redevelopment parties on the basis of providing world-class facilities for CBA with a wide range of supporting office space, retail and community facilities, together with significant public domain upgrades.

The redevelopment of ATP in accordance with the vision set by the NSW Government would therefore not be realised under an alternative proposal to Mirvac.

## 1.5 Secretary's Environmental Assessment Requirements

In accordance with section 89G of the EP&A Act, the nominee of the Secretary of the Department issued requirements for the preparation of the EIS on 29 October 2015. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix A**.

The SEARs require that the EIS must include the documents listed in Schedule 1 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation) and must meet the requirements of Schedule 2 of the Regulation, specifically the form specifications in Clause 6 and the content specifications in Clause 7. Several stakeholders were identified with whom consultation must occur during the preparation of the EIS.

**Table 1** provides a detailed summary of the individual matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

**Table 1 – Secretary's Environmental Assessment Requirements**

Secretary's Environmental Assessment Requirement	Location in Report	
General Requirements	Section	Appendix
The Environmental Impact Statement (EIS) must address the <i>Environmental Planning and Assessment Act 1979</i> and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.	Throughout	-
Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.	Section 6.0	-
Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:		
– adequate baseline data;	Section 6.0	
– consideration of potential cumulative impacts due to other development in the vicinity; and	Section 6.0	-
– measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.	Section 6.0	-
The EIS must be accompanied by a report from a qualified quantity surveyor providing:	-	Under Separate Cover
– a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;		
– an estimate of the jobs that will be created by the future development during the construction and operational phases of the development; and	-	Under Separate Cover
– certification that the information provided is accurate at the date of preparation.	Page 1	-
Key Issues	Section	Appendix
Statutory Context		
The EIS must address	Section 5.2	-
– the statutory provisions applying to the development contained in all relevant environmental planning instruments, including:		
– the Environmental Planning & Assessment Act 1979;		
– SEPP (State & Regional Development) 2011;	Section 5.4	-
– State Environmental Planning Policy (Major Development) 2005;	Section 5.4	-
– State Environmental Planning Policy (Infrastructure) 2007;	Section 5.4	-
– State Environmental Planning Policy (Urban Renewal) 2010;	Section 5.4	-
– State Environmental Planning Policy No. 55 – Remediation of Land;	Section 5.4	-
– State Environmental Planning Policy No. 1 –	Section 5.4	-

Secretary's Environmental Assessment Requirement	Location in Report	
Development Standards; and		
– Sydney Local Environmental Plan 2012.	Section 5.4	-
Address the relevant planning provisions, goals and strategic planning objectives in the following:	Section 5.3	-
– Plan for Growing Sydney;		
– Sydney 2030 (The City of Sydney Council);	Section 5.3	-
– Development Near Rail Corridors and Busy Roads-Interim Guideline;	Section 5.3	-
– Guide to Traffic Generating Developments (RMS);	Section 5.3	-
– NSW Planning Guidelines for Walking and Cycling;	Section 5.3	-
– NSW Long Term Transport Master Plan;	Section 5.3	-
– Redfern Waterloo Built Environment Plan (Stage One) August 2006;	Section 5.3	-
– Sydney Development Control Plan 2012;	Section 5.3	-
– Redfern Waterloo Authority Contributions Plan 2006;	Section 5.3	-
– Redfern Waterloo Authority Affordable Housing Contributions Plan 2006;	Section 5.3	-
– Sydney's Cycling Future; and	Section 5.3	-
– Sydney's Walking Future	Section 5.3	-
<b>Gross Floor Area and Land Use Mix</b>		
The EIS shall address:	Section 5.5	Appendix D
– the proposed distribution of Gross Floor Area across the site and justify any non-compliance with the development standards within State Environmental Planning Policy (Major Development) 2005; and		
– how the proposed land use mix is consistent with the envisaged character for the ATP precinct.	Section 5.5	Appendix B
<b>Built Form and Design Quality</b>		
The EIS shall:	Section 5.5	Appendix B and D
– demonstrate how the proposed buildings will achieve design excellence in accordance with the general urban design principles of the Redfern Waterloo Built Environment Plan (Stage One) August 2006;		
– address the height, bulk and scale of the proposed buildings within the context of the locality and ensure the proposal does not create unacceptable environmental impacts. This shall include:	Section 5.5	Appendix B
– view analysis to and from the site from key vantage points and streetscape impacts. Photomontages or perspectives should be provided showing the proposed envelopes;		
– analysis and detailed justification for the proposed building height in the context of adjoining developments and height controls;		
– consideration of the relationships and interface with existing buildings, public domain and street network;		
– detail the design quality of the buildings, with specific consideration of the overall site layout, connectivity, open spaces and edges, façades, massing, setbacks, building articulation, materials, colours, landscaping, rooftop and mechanical plant; and	Section 5.5	-
– address how the proposal retains and promotes the existing and future built form character and fabric of ATP.		
<b>Public Domain and Urban Design</b>		
– The EIS shall:	Throughout	-
– address all aspects of the public domain including open spaces within the precinct, road paving, on-street parking, footpaths, cycleways, tree planting, outdoor dining, public		

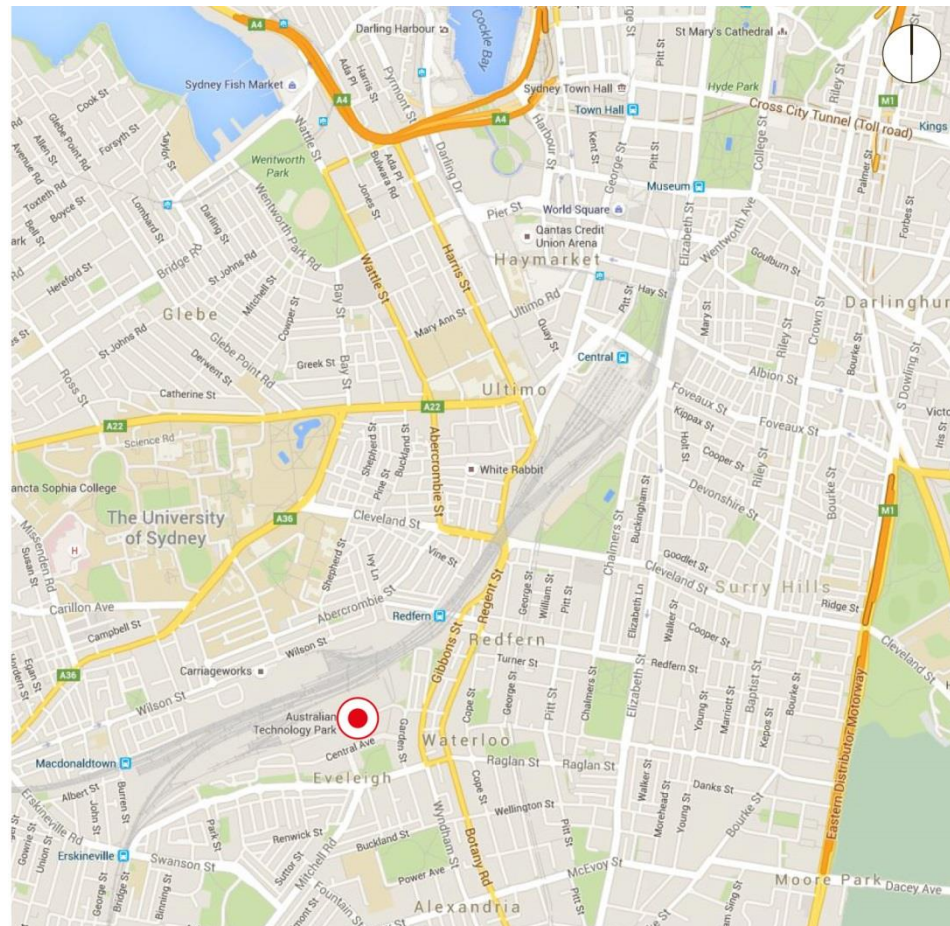
Secretary's Environmental Assessment Requirement	Location in Report	
art and lighting;		
– identify and analyse key pedestrian desire lines to the surrounding area and links to Redfern Railway Station;	Throughout	-
– demonstrate the pedestrian circulation, accessibility and connections on site and to surrounding streets in a schematic form;	Throughout	-
– demonstrate how the proposed development will incorporate and achieve public access throughout the site, consistent with the terms of the draft Public Access Covenant prepared for the site;	Throughout	-
– identify important sight lines and visual connectivity to and through the site;	Throughout	-
– address water sensitive urban design opportunities within the public domain and landscaping; and	Section 5.24	Appendix P
– address crime prevention through urban design principles.	Section 5.22	Appendix T
<b>Ecologically Sustainable Development (Environment)</b>		
The EIS shall:	Section 5.24	Appendix P
– detail how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the future design, construction and ongoing operation phases of the developments;		
– address the potential for sustainable technologies and/or renewable energy to achieve any sustainability best practice initiatives; and	Section 5.24	Appendix P
– provide an integrated Water Management Plan including alternative water supply, proposed end use of potable and non-potable water, water sensitive urban design and water conservation measures.		
<b>Transport and Accessibility (Construction and Operation)</b>		
The EIS shall include a Traffic and Transport Impact Assessment that:	Section 5.8	Appendix F
– demonstrates that the level of car parking within the development will fall within the maximum 1,600 spaces permitted across the ATP under the State Environmental Planning Policy (Major Development) 2005 while:		
– addressing the demand for car parking and the loss of existing tenant parking provided on the site;	Section 5.8	Appendix F
– demonstrating that parking rates support the shift to public transport use and sustainable travel choices;	Section 5.8	Appendix F
– demonstrates how the development will support Government strategies in promoting sustainable travel choices, for its future staff and visitors. The EIS should determine the adequacy of pedestrian and cycle facilities to meet the likely future demand of the proposed development and give consideration of measures to be implemented; and	Section 5.8	Appendix F
– detail the traffic and transport impacts (including bus services and infrastructure) during construction and how these will be mitigated including the preparation of a preliminary Construction Traffic Management Plan.	Section 5.8	Appendix F
<b>European and Aboriginal Heritage</b>		
The EIS shall include a Heritage Impact Assessment that:	Section 5.9	Appendix G
– addresses the impacts of the proposal on the heritage significance of the ATP precinct;		
– addresses how the proposal complies with the policies of the <i>Australian Technology Park Conservation Management Plan</i> endorsed by the Heritage Council of NSW on 20 March 2014;	Section 5.9	Appendix G
– assesses the impact of the proposal on any aboriginal and	Section 5.9	Appendix G

Secretary's Environmental Assessment Requirement	Location in Report	
non-aboriginal archaeology within the ATP precinct and outline any proposed management and conservation measures to protect and preserve archaeology; and		
– demonstrates how the proposal will achieve collective management of heritage significant assets of the ATP precinct and complies with the objectives of the draft Heritage Covenant, heritage asset management strategy, and section 170 Register.	Section 5.9	Appendix G
<b>European and Aboriginal Heritage</b>		
The EIS shall address:	Section 5.25	-
– the contributions payable pursuant to the <i>Redfern-Waterloo Authority Affordable Housing Contributions Plan 2006</i> and the <i>Redfern Waterloo Authority Contributions Plan 2006</i> ; and		
– additional contributions proposed or material public benefits associated with any proposed floor space above existing planning controls.	Section 5.25	-
<b>Plans and Documents</b>	<b>Section</b>	<b>Appendix</b>
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.	Throughout	Various
In addition, the EIS must include the following:	Throughout	-
– site plan, clearly identifying the extent of the site;		
– architectural drawings;		
– site survey plan, showing existing levels, location and height of existing and adjacent structures/buildings;		
– site analysis plan;		
– stormwater plans;		
– shadow diagrams;		
– view analysis/photomontage;		
– public domain and landscape plans;		
– 3D perspectives & photomontages of the proposed development;		
– heritage impact assessment;		
– archaeological impact assessment;		
– ecologically sustainable development report;		
– traffic and parking impact statement;		
– draft Construction Traffic Management Plan;		
– geotechnical and structural report; and		
– contamination report.		

## 2.0 Site Analysis

### 2.1 Site Location and Context

The ATP site is strategically located approximately 5km south of the Sydney CBD, 8km north of Sydney airport and within 200m of Redfern railway station. The site is located within the City of Sydney local government area (LGA). The site's locational context is shown at **Figure 1**.



● The Site

**Figure 1** – Location of the Australian Technology Park

ATP is strategically located on the south-eastern side of a major railway corridor and adjacent to Redfern railway station, one of Sydney's busiest stations. Passenger barrier counts within a 24 hour period have increased from 16,480 to 25,680 in the decade from 2004 to 2014 (TfNSW Bureau of Transport Statistics, 2015). Notwithstanding, Redfern is also one of Sydney's largest transport interchanges which provides direct access to numerous suburban and intercity lines feeding to Central and the City Circle.



## 2.2 Site Description

### 2.2.1 The ATP Precinct

The ATP site is a large land holding owned by the NSW Government through Australian Technology Park Sydney Limited which is managed by UrbanGrowth NSW Development Corporation (UGDC).

The site has an overall area of some 13.2 hectares and is bounded by one of Sydney's primary railway arteries to the north, railway workshops and yards to the north-west, government-owned community housing to the west, Henderson Road to the south and Garden & Cornwallis Streets to the east. The ATP precinct is indicated within **Figure 2**.



 The Site

**Figure 2** – Aerial photograph of the ATP precinct  
*Source: Nearmap, 2015*

Historically ATP was used for the purposes of railway maintenance, storage and other associated industries. Use of the site as marshalling yards and workshops formed part of a large railway-based precinct on both sides of the main railway line, dating from 1882 and growing in its size until its closure in 1989.

Since this time, the precinct has been progressively redeveloped and repurposed as a multi-faceted high-technology business park, with integrated research and community facilities together with publicly accessible parklands and open space.

At the present time, the ATP site features science, communications, information technology, government agencies and media companies across several existing buildings, as shown within the ATP site map in **Figure 3**.



**Figure 3** – The existing ATP precinct map  
Source: Australian Technology Park

Some buildings are of heritage significance and have been repurposed whilst other modern buildings have been progressively constructed since the opening of the park in 1996-1997. Key buildings and their uses include:

- 'Media City' (Channel 7 building);
- National Information Communications Technology research centre (NICTA Building);
- Biomedical Building (occupied by University of Sydney);
- Locomotive Workshop;
- National Innovation Centre; and
- International Business Centre.

In particular, the Locomotive Workshop is an expansive space containing 16 bays with various components repurposes to include:

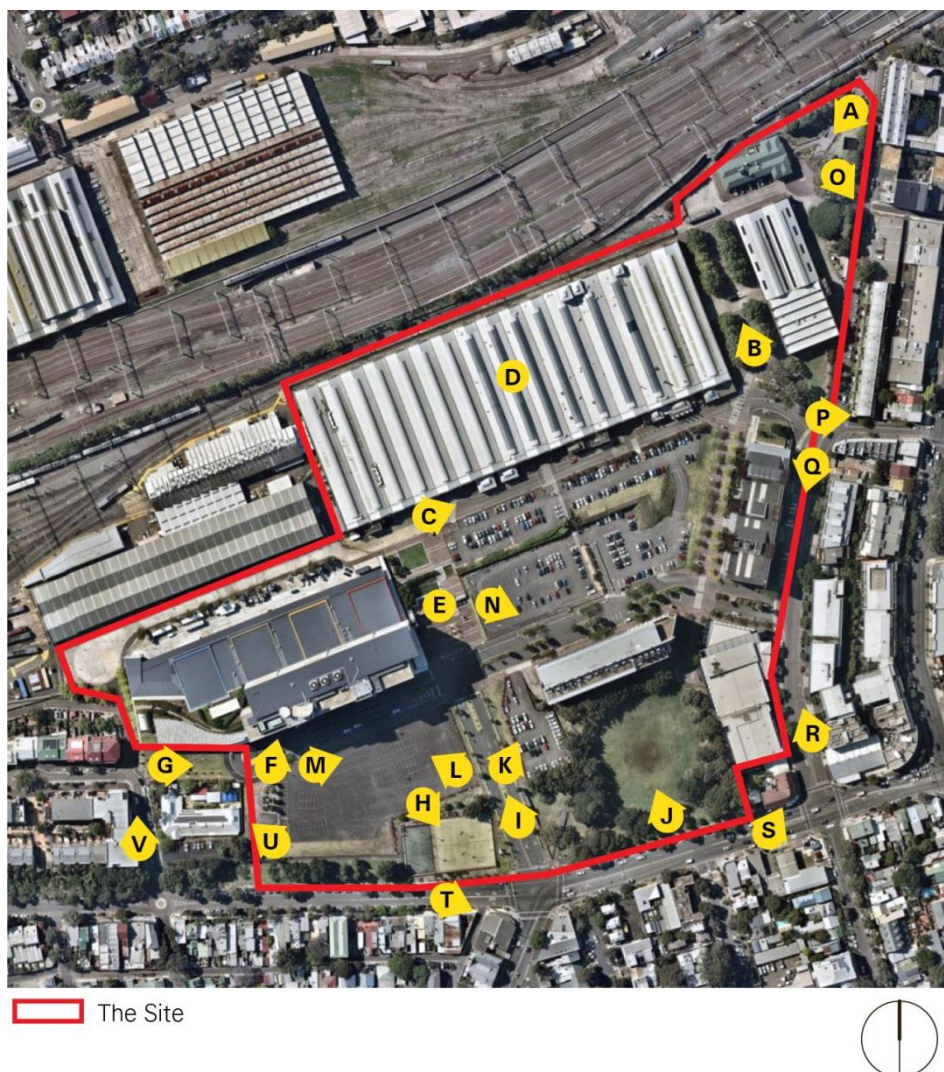
- An Exhibition Hall of 6,850sqm with capacity for up to 3,500 guests in a variety of configurations;
- Dining room and atrium at 598sqm and capacity for up to 600 guests in varying configurations;
- Theatre atrium at 524sqm for 520 guests;
- Bay 6 Theatrette with 148sqm and tiered seating for 137 guests; and
- Various meeting room facilities;
- Business offices; and
- Heritage transport displays.



In addition, ATP also provides publicly accessible recreational facilities including the Vice Chancellor's Oval, Innovation Plaza and Mitchell Way which provide both passive and active open space and serve as pedestrian and cycle links to the surrounding locality. Multi-purpose courts are also provided for the use of workers of ATP and the wider community adjacent to the intersection of Davy Road and Henderson Road.

ATP also provides a variety of small scale café and retail facilities in various buildings within the site and also provides child care services operated by the City of Sydney at the Alexander Child Care Centre (41 Henderson Road), which is immediately to the west of the site and has a total of 66 child places.

Provided at **Figure 4** is an aerial photograph of the precinct with letters A to J corresponding with photographs of the ATP site at **Figures 5 to 14**.



**Figure 4** – Aerial photograph of the ATP and immediate surrounds  
Source: Nearmap, 2015





**Figure 5** – Location A, the northern pedestrian access point to the site with the National Innovation Centre on left and the International Business Centre on the right of the central pedestrian zone



**Figure 6** – Location B, Innovation Plaza which is a primary pedestrian thoroughfare and is located within ATP to the east of the Locomotive Workshop



**Figure 7** – Location C, Locomotive Workshop as seen from the centre of ATP off Locomotive Street. Bay Nos. 11-13 are shown



**Figure 8** – Location D, A photo of the interior of a typical bay inside the Locomotive Workshop



**Figure 9** – Location E, ATP Central Plaza at the intersection of Central Avenue and Davy Road



**Figure 10** – Location F, The Media City Building (Channel 7) as viewed from Henderson Road



**Figure 11** – Location G, The western entrance to ATP and Media City as seen from Alexander Street



**Figure 12** – Location H, Community facilities including multi-purpose courts adjacent to Henderson Road entrance to ATP



**Figure 13** – Location I, The southern entrance to ATP and Media City as seen from Davy Road



**Figure 14** – Location J, The Biomedical Building, as viewed from the Vice Chancellor's Oval within the southern section of ATP off Henderson Road

## 2.2.2 The Development Site

The development site, applicable to this SSDA comprises the following allotments:

- Lot 8 in DP 1136859 (Proposed Community Building);
- Lot 9 in DP 1136859 (Proposed Building 1);
- Lot 10 in DP 1136859 (Existing Channel 7 /Media City Building & Surrounds);
- Lot 12 in DP 1136859 (Proposed Building 2); and
- PT 4007 in DP 1194309 (Public Domain and Streets).

All of these allotments are entirely within the broader ATP site as indicated within **Figure 15**. The three 'development zones' proposed for new buildings are Lots 8, 9 and 12. The balance of works relates to public domain improvements vastly within PT 4007, but with some works within Lot 10 (Central Plaza).

Lots 8, 9 and 12 being the primary 'development zones' are described further within this section, with an aerial photograph depicting their location provided at **Figure 15**.



Lots 10 and PT 4007 are described further within the context of the broader ATP precinct throughout Sections 2.0 and 3.0. It is noted that this SSDA does not propose any works to the Locomotive Workshop which forms part of PT 4000.

#### Lot 8 (Community Building)

Lot 8, which is indicated as the Community Building or Building 3, within **Figure 15**, is an existing at-grade car park for workers and visitors of ATP. This allotment is irregular in shape, with a primary frontage to Davy Road of 64m and a depth of approximately 30m, giving a site area of circa 1,937sqm.

This allotment is generally level and comprises hard surfaced area, with some small shrubs and grass within landscaped beds surrounding the parking areas.

#### Lot 9 (Building 1)

Lot 9, which is indicated as Building 1 within **Figure 15**, is an existing at-grade car park. These facilities are used infrequently and are disused. Previously they have been allocated for special events which take place from time to time within the Locomotive Workshops.

This allotment is an irregular shape and has boundaries of approximately 135m to Central Avenue, 64m to Davy Road, a broken boundary to the south to the ATP multi-purpose courts and Henderson Road of 155m and to the west to the Alexander Child Care Centre of 45, giving a site area of circa 8,299sqm.

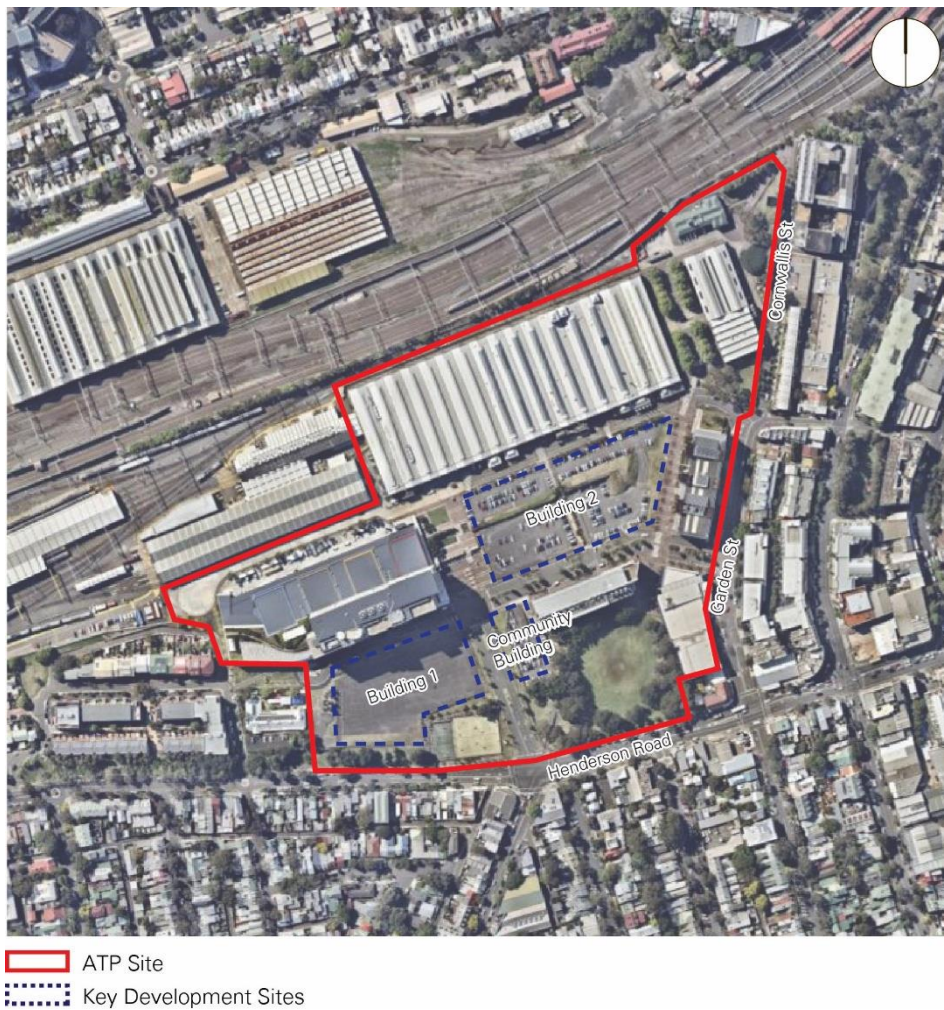
This allotment is generally level and largely hard surfaced, with some small shrubs and grassed areas surrounding the parking areas.

#### Lot 12 (Building 2)

Lot 12, which is indicated as the Building 2 within **Figure 15**, is an existing at-grade car park for workers and visitors of ATP. This allotment is irregular in shape, with a primary frontage to Locomotive Street of approximately 175m, approximately 135m to Central Avenue, 75m to Central Plaza and 83m to Mitchell Way, giving a site area of circa 11,850sqm.

The allotment is split into an upper and lower portion as the site falls to the south. The portions are separated by a retaining wall and shrubs. The level change between the upper and lower portions is approximately 4m. As with the other lots, this lot is also generally hard surfaced, with some small shrubs and grassed areas surrounding the parking areas.

Provided below at **Figure 15** is an aerial photograph of the ATP site with the three development sites subject of this SSDA within ATP indicated with the dashed blue outlines.



**Figure 15** – The ATP Site with the development lots outlined in blue

Provided below at **Figures 16 to 19** are photographs of the three development sites from within ATP. The location letters K to N listed in the caption of these images, correspond with the location letters provided within **Figure 4**.



**Figure 16** – Location K, Lot 8 as viewed towards the north from Davy Road



**Figure 17** – Location L, Lot 8 as viewed towards the north from Davy Road



**Figure 18** – Location M, Lot 9 as viewed to the east from Central Avenue



**Figure 19** – Location N, Lot 12 as viewed towards the east from Central Plaza

### 2.2.3 Access & Parking

#### Pedestrian Access

Pedestrians can access the site via a variety of means. Primary pedestrian accessibility is achieved through a central spine runs from north-east through to the south-west portion of the site. This series of paths from Cornwallis Street through Innovation Plaza and Mitchell Way, past the Vice Chancellor's Oval to the intersection of Davy Road and Henderson Road.

In addition, north-south connectivity is provided from Locomotive Street via Central Plaza through to Davy Road. East-West connectivity is facilitated from Garden Street along Central Avenue through to Alexander and Rowley Streets.

All main pedestrian access points into the ATP site are provided with wayfinding signage including maps, with several direction markers provided along these key routes.

## Cycling

The site is accessible to cyclists via a number of cycle routes, including some with dedicated cycleways or lanes. The ATP site itself is a key off-road cycle route within the area from Cornwallis Street through to Henderson Road. At the northern end, the ATP site connects with a dedicated cycle path along the Gibbons Street Park and along Gibbons Street towards Lawson Street. At the southern end, the ATP site connects with on-street lanes along Henderson Road.

In addition, the site is in short riding distance from the George Street, Waterloo dedicated cycleway which is the primary north-south cycle route within the surrounding area, which provides connection from Green Square through to Central Railway station via Prince Alfred Park.

## Rail

The site has outstanding rail connectivity, with immediate proximity to Redfern railway station. The northern most pedestrian link to and from ATP is approximately 50m from the southern entrance to Redfern railway station (Platform 10).

As previously mentioned, Redfern is a key station on the Sydney Trains network with excellent connectivity to the wider network. Frequent services stopping at Redfern are provided on the following suburban and intercity lines:

- T1 North Shore, Northern & Western Lines;
- T2 Inner West & South Lines;
- T3 Bankstown Line;
- T4 Eastern Suburbs & Illawarra Lines;
- Central Coast & Newcastle Intercity Line;
- Blue Mountains Intercity Line; and
- South Coast Intercity Line.

In addition, Redfern is only one stop from Sydney Central station which provides further rail services on the Airport line and on NSW TrainLink regional services which also provide a range of connections within wider NSW and to other capital cities.

## Bus

The ATP precinct is located in close proximity to a number of bus services, providing cross-regional access to the site. Routes stopping in nearby Wyndham/Gibbons Street and Botany Road include:

- Route 305 – Central Railway Square to Mascot via Waterloo, Alexandria and Beaconsfield;
- Route 308 – Sydney CBD to Marrickville Metro via Waterloo, Eveleigh and Erskineville;
- Route 309 – Central Railway Square to Port Botany via Waterloo, Alexandria, Beaconsfield, Mascot, Botany, Banksmeadow and Matraville; and
- Route 310 – Central Railway Square to Eastgardens via Waterloo, Alexandria, Beaconsfield, Mascot and Botany.

## Vehicular Access & Parking

Vehicular access to ATP is facilitated through three separate connections within different sections of the site, with security boom gates at various points to control access to allocated parking and loading spaces.



The upper (northern) car parks are accessed from Locomotive Street which connects to Garden Street. The lower (southern car parks) are accessed from either Davy Road via its signalised intersection with Henderson Road, or from Central Avenue which connects to Garden Street. Davy Road and Central Avenue form a vehicular thoroughfare through the site.

The ATP site currently contains a total of 1,453 car parking spaces spread across the site as follow:

- Channel 7 Building – 702 spaces;
- Open air car park (adjacent to Locomotive Workshop) – 280 spaces;
- Biomedical Building – 33 spaces;
- Locomotive Workshop – 4 spaces;
- National Innovation Centre – 4 spaces;
- International Business Centre – 17 spaces;
- NICTA Building – 66 spaces;
- Street Parking – 22 spaces;
- Open air car park adjacent to the Channel 7 Building – 272 spaces;
- Open air car park adjacent to Biomedical Building – 53 spaces;
- Total – 1,453 spaces.

### Car Share

ATP contains two car share vehicles within the northern car park (Lot 12) and several others within the surrounding area including within Henderson Road, Gerard Street and Cornwallis Street.

## 2.2.4 Heritage and Archaeology

A combined Heritage Impact Statement, Archaeological Impact Statement and Heritage Interpretation Strategy has been prepared by Curio Projects and is provided at **Appendix G**.

This report assesses all known and potential heritage impacts and archaeological impacts associated with the proposed development of the site against the policies and guidelines included in the endorsed Conservation Management Plan (CMP) for the site, titled Australian Technology Park Conservation Management Plan Volume 1 Sydney, prepared by Godden Mackay Logan (December 2013).

Specifically, the report by Curio Projects assesses the proposed development's impact on:

- The overall significance of ATP, within its broader setting;
- Significant built heritage items;
- Movable industrial heritage items; and
- Archaeological resources, including both Aboriginal and historical.

### Heritage

The current ATP site was originally occupied by Chisolm Estate from 1835 until selected as the site for new government railway yards in 1875. The site was then occupied by a large complex of rail workshops and yards throughout the late nineteenth and most of the twentieth century. The northern part of the ATP site, next to the western rail lines, was occupied by the Eveleigh Locomotive Workshops, while the southern part of the site was occupied by the Alexandria Goods Yard.



Three of the four most significant buildings of the Eveleigh Locomotive Workshops have been retained within the ATP site, namely the locomotive workshop, the new locomotive shop and the works manager's office. The adaptive re-use of the workshops has been carried out sensitively, but inevitably with such a substantial change in use (railway workshops to technology park), the character of the site as a whole has changed. Physical remnants of past use is generally confined to the workshops buildings remaining and the machinery collections contained within, with some machinery and rail lines located throughout the site.

The Eveleigh Railway Workshops and Eveleigh Railway Workshops Machinery are listed on the following statutory heritage registers under the Heritage Act 1977 (NSW) (the Heritage Act):

- NSW State Heritage Register; and
- Australian Technology Park S170 Heritage and Conservation Register (ATP S170 Register).

The following items are also listed, individually, on the ATP S170 Register:

- Eveleigh Locomotive Workshops Precinct;
- Eveleigh Locomotive Workshops Machinery Collection;
- Engine Shop (former);
- Locomotive Workshops Building;
- Works Managers' Office (former); and
- Water Tower.

## Archaeology

The report confirms that no Aboriginal sites are recorded in or near the site and no Aboriginal places have been declared in or near the site by means of an Office of Environment and Heritage AHIMS search.

In addition, there are various opportunities for the proposal to impact archaeological relics of local or state significance. The assessment concludes that the majority of the site has been subject to cutting down and major impacts from the construction of the railway yards and in more recent times, as a result of new buildings, the construction of the train line and the installation of multiple services across the site, diminishing the probability of archaeologically significant relics to be found on the site in conjunction with the proposed excavation works.

## 2.2.5 Soil and Geotechnical Conditions

A preliminary Geotechnical Investigation has been carried out by Douglas partners and is included as **Appendix K**. The Report presents the findings of a desktop study, which determines the likely geotechnical and soil characteristics of the ATP development sites. The report also draws upon previous geotechnical investigations carried out at ATP in making its assessment.

### Site Geology

The site is underlain by Quaternary aged alluvial and estuarine sediments which typically comprise silty to peaty quartz sand, silt and clay. The sediments in turn are underlain by shale, laminite and then Hawkesbury Sandstone. Field investigation data confirmed the presence of filling in each lot.

### Subsurface Conditions

Various geotechnical investigations have previously been undertaken at the site, with the most recent studies being undertaken in 2014-2015. The Geotechnical

Assessment Report has collated the findings of these investigations to identify distinct geotechnical subsurface profiles present across the site. These include:

- Fill, typically between 2.5m and 4m in Lots 8 and 9, and between 1.5m and 6m in Lot 12;
- In situ soils within Lots 8 and 9 comprise sand (4m to 6m), then peat (0.5m), then clay developed on shale, and in Lot 12 comprise clay/sand on shale; and
- Extremely to highly weather rock between RL12m and RL14m with medium rock below RL10m. Specifically in Lot 9, the top of rock is about RL4m and in Lot 8 is estimated to be between RL2m and RL6m.

Groundwater levels within the lower portions of the site, Lots 8 and 9, was consistently encountered at depth of 2-3m. These groundwater levels are subject to rapid change following rain events.

## 2.2.6 Site Contamination

A Detailed or Phase 2 Site Contamination Assessment for the entire ATP precinct has been prepared by JBS&G (**Appendix L**).

JBS&G confirm that there have been numerous historical site investigations which have assessed contamination within ATP over the last 22 years, with the number of investigation locations exceeding the minimum guidelines.

Fill materials are present underlying the site and variously comprise gravelly sands, silty sands, clayey sands, peat with inclusions of railway ballast, glass, ash, metal, ceramic, brick, slag, sedimentary clast and construction rubble. Site investigations reveal that contamination sources are present at levels exceeding adopted ecological criteria and in relatively few locations, exceeding the adopted health-based criteria. There were no significant amounts of volatile contaminants detected in fill materials. Contaminants found included:

- Heavy metals;
- TPH/TRH and PAH;
- Isolated asbestos samples;
- Elevated and volatile COPC concentration (Lot 9); and
- Potential and actual acid sulphate soils.

However, the assessment considered that the site can be made suitable for the proposal provided that a suitable remediation plan/management strategy is appropriately implemented as part of the redevelopment.

To address this, a Remediation Action Plan has also been prepared by JBS&G (**Appendix M**) to characterise environmental impacts, identify remedial strategies and to document risk mitigation procedures to make the site suitable for the proposed development. This is further discussed at Section 5.16.

## Groundwater Contamination

Groundwater has been assessed across the broader ATP precinct and is generally considered to be acceptable in terms of quality. Notwithstanding, the potential for detrimentally affecting groundwater conditions, for example by increased contaminant leaching, needs to be considered in the redevelopment. Isolated portions of fill within Lots 9 and 12 which have been identified as potentially containing leachable zinc and lead concentrations may require further management.

## 2.2.7 Utilities and Infrastructure

AT&L Engineers have undertaken a Civil Infrastructure Report (**Appendix N**) to inform the detailed design of the civil, stormwater and infrastructure services to service the proposal. Provided as follows is a summary of utilities, services and infrastructure present within each development lot:

### Lot 8 (Community Building)

- Local stormwater collection infrastructure within the existing car park which drains into the Chancellor's Oval detention basin;
- Sydney Water 200mm water main located immediately to the north of the site;
- Sydney Water 225mm sewer main located within the south-western corner of the site;
- High and low voltage electrical feeders located within Central Avenue and Davy Street; and
- Existing Telstra conduits located along the eastern site boundary.

### Lot 9 (Building 1)

- An existing 900mm stormwater pipe runs north-south underneath this allotment approximately 25m from the eastern boundary.
- Sydney Water 150mm water main present along the western boundary;
- Sydney Water 225mm sewer main runs diagonally across the lower section of the site;
- High and low voltage electrical feeders located within Central Avenue and Davy Street; and
- Telstra communication conduits present within Central Avenue to the north of the site.

### Lot 12 (Building 2)

- Local stormwater collection infrastructure within the existing car park which drains into Central Avenue
- Sydney Water 200mm water main located along the eastern boundary;
- Sydney Water 225mm sewer main, adjacent to the northern boundary of the site in Locomotive Street;
- High and low voltage electrical feeders located within Central Avenue and Davy Street;
- Jemena 110mm diameter gas main running within the northern side of Central adjacent to the southern site boundary; and
- Various Telstra and Optus conduits located within the site boundaries.

## 2.3 Surrounding Locality

The surrounding locality has a varied built form character present. There is a range of residential, commercial office, retail and some light industrial uses present within the immediate locality. The site is also located within a broader renewal/transformation corridor from Central to Eveleigh.

To the east of ATP are generally an intermixing of residential, shop-top housing and commercial land uses. Within the north-eastern section of the site adjacent to Cornwallis Street are medium to high density residential apartments and commercial suites, some of which have been converted from previous warehouse uses. Further along Cornwallis and Garden Streets to the east, are a

range of lower density residential terraces, apartments and attached dwellings with an interspersing of some light industrial and commercial uses. Further to the south-east, the intersection of Garden Street and Henderson Road contains a concentration of retail type land uses with a pub, service station and local shops and showrooms present. These buildings were constructed over a wide period of time.

To the south of the site, on the southern side of Henderson Road are predominately residential terraces and attached dwellings. In addition, there is an interspersing of non-residential land uses such as pubs, local shops and services to meet the day to day needs of surrounding residents. These buildings typically date from the early 1900s, with many having undergone significant alteration from this time.

To the west of the site, surrounding Alexander and Rowley Streets is a more recent grouping of medium density residential flat buildings, dating from the early 1990s. Immediately adjoining the ATP site to the west, is the single storey Alexander Child Care Centre which is operated by the City of Sydney.

To the north and north-west of the site, is the main railway line and adjacent railway based infrastructure. This includes operational railway maintenance workshops and stabling yards.

The surrounding locality is shown within several photographs below, from adjoining buildings to the north-eastern in an anti-clockwise direction finishing with photographs to the north-west (**Figure 20** to **Figure 27**). . The location letters O to V listed in the caption of these images, correspond with the location letters provided within **Figure 4**.



**Figure 20** – Location Q, Existing buildings located on the opposite side of Cornwallis St



**Figure 21** – Location P, Recently constructed residential apartment at the corner of Garden and Boundary Streets



**Figure 22** – Location Q, Existing residential buildings located on the opposite side of Garden Street with the NICTA building located on the right



**Figure 23** – Location R, Nearby residential units, existing retail located on Garden Street with the NICTA building in the background



**Figure 24** – Location S, Alexandria Hotel at the corner of Henderson Road and Garden Street



**Figure 25** – Location T, Adjacent dwellings to the south of Henderson Road





**Figure 26** – Location U, Adjoining to the west is the Alexander Child Care Centre



**Figure 27** – Location V, Adjacent apartment to the west to Alexander Street

### 3.0 Description of the Development

This chapter of the report provides a detailed description of the proposed development, which comprises the following key components:

- Site preparation works, including demolition and clearance of the existing car parking areas/ancillary facilities, excavation and remediation;
- Construction and use of three (3) new buildings for mixed commercial, retail and community purposes, which include:
  - Building 1, nine (9) storeys(excluding plant) commercial office building, with ground level retail and childcare, comprising a total of 46,832m<sup>2</sup> GFA
  - Building 2, seven (7) storey (excluding plant) commercial office building, with ground level retail including supermarket, comprising a total of 56,688m<sup>2</sup> GFA;
  - Community Building, four (4) storey (excluding plant) multi-purpose building including commercial office, community office, childcare, retail and gym uses, comprising a total of 3,911m<sup>2</sup> GFA;
- Provision of car parking within Buildings 1 and 2, accessed from Central Avenue, providing 706 car spaces, motorcycle spaces, service / courier spaces, and 606 secure bicycle spaces;
- End of trip facilities (including changing rooms, lockers, showers and toilets) within Buildings 1, 2 and the Community Building;
- Fit out and use of the childcare centre and gym floorspace;
- Significant public domain improvement works including: roadway resurfacing/reconfigurations, enhanced streetscapes, landscaping upgrades/plantings and public furniture, lighting and interpretive heritage/art at various locations within ATP; and
- Extension and augmentation of physical infrastructure / utilities for the development, including provision of new substations.

Architectural drawings of the proposed development have been prepared by FJMT + Sissons Architects and are included together with the Design Report (**Appendix B**). Public Domain Drawings prepared by Aspect Studios are included at **Appendix C**. A photomontage of the proposal is provided at **Figure 28**.



**Figure 28** – Photomontage of the proposal as viewed from Henderson Road and Davy Road  
Source: FJMT + Sissons

### 3.1 Numerical Overview

The key numeric development information is summarised in **Table 2**.

**Table 2** – Key development information

Component	Proposal
<b>Overall Site</b>	
Total Site area	
▪ Lot 8 (Proposed Community Building)	1,937m <sup>2</sup>
▪ Lot 9 (Proposed Building 2)	8,299m <sup>2</sup>
▪ Lot 10 (Existing Media City/Chanel 7 Building)	16,047m <sup>2</sup>
▪ Lot 12 (Proposed Building 2)	11,850m <sup>2</sup>
▪ PT 4007 (Public Domain, Oval and Streets)	5,367m <sup>2</sup>
▪ Lot 501 (Portion of Oval)	213m <sup>2</sup>
Car Parking	
▪ Existing Car Parking (ATP Site)	▪ 1,453 car spaces
▪ Proposed Car Parking (ATP Site)	▪ 1,574 car spaces
▪ Development specific breakdown	– Within Building 1 and 2: 706 car spaces
	– On Street: 42 car spaces
▪ Car Parking Cap (SEPP MD) 2005	▪ 1,600 car spaces
Total GFA (Buildings 1, 2 and Community Building)	107,430m <sup>2</sup>
<b>Proposed Individual Building Data</b>	
<b>Building 1</b>	
Maximum Height	▪ 9 storeys (excluding plant)
	▪ RL57.9m AHD
Floor Areas	
– Commercial/Office	– 45,663m <sup>2</sup> GFA
– Retail	– 314m <sup>2</sup> GFA
– Child Care	– 855m <sup>2</sup> GFA
▪ Total GFA	▪ 46,832m <sup>2</sup>
Car Parking	217 car spaces (including 19 external spaces)
<b>Building 2</b>	
Maximum Height	▪ 7 storeys (excluding plant)
	▪ RL51.99m AHD (excluding roof feature)
Floor Areas	
– Commercial/Office	– 54,593m <sup>2</sup> GFA
– Retail	– 2,095m <sup>2</sup> GFA
▪ Total GFA	▪ 56,688 m <sup>2</sup>
Car Parking	489 car spaces
<b>Community Building</b>	
Maximum Height	▪ 4 storeys (excluding plant)
	▪ RL38.0m AHD
Floor Areas	
– Retail/Gym/Lobby	– 953m <sup>2</sup> GFA
– Child Care	– 794m <sup>2</sup> GFA
– Community/Office	– 1,082m <sup>2</sup> GFA
– Office	– 1,082m <sup>2</sup> GFA
▪ Total GFA	▪ 3,911m <sup>2</sup>
Car Parking	Nil

Source: FJMT + Sissons & Mirvac Projects, December 2015



## 3.2 Development / Urban Design Principles

The proposal involves three primary buildings which have been designed in accordance with the principles identified with the Design Report prepared by FJMT + Sissons Architects (**Appendix B**).

ATP is an integration of workplace, urban design, architecture and place making. Two major workplace buildings (referred to as Building 1 and Building 2) and a smaller community building sit within a series of public spaces including tree lined streets, landscaped green spaces and a major central civic space (**Figure 29**). This urban approach will create an active village and engaging public domain offering workers and the wider community diverse and unique opportunities for recreational and work activities.



**Figure 29** – New buildings proposed (white) and upgraded streets (orange)  
Source: FJMT + Sissons

The key planning and design principles adopted and which have informed the proposal include (refer to the Design Report at **Appendix B** for full details):

- Achieve design excellence in architectural, landscape and urban design.
- Deliver building forms and state of the art space which drives and supports innovation and technology.
- Establish a built form and massing which responds to the immediate context and character of the site and provide a transition between scales.
- Reinforce the sense of enclosure to the streets, reinforce street alignments and achieve an appropriate human scale at street level.
- Support the existing built form (including heritage) character of ATP.
- Maximise opportunities for street activation and amenity for occupants and visitors.
- Incorporate sustainability principles, including building design that maximises energy efficiency.

- Considers solar access to adjacent developments, open space and the public domain in accordance with best practice.
- Minimise wind impacts on pedestrian amenity.
- Provide active frontages to all public domain areas including streets and parks to maximise informal surveillance.

FJMT + Sissons have developed the architecture in parallel with the public domain proposals as prepared by Aspect Studios. As noted in Aspect Studios SSDA report, the public domain seeks to:

*".....unlock this former industrial site and recreate it as a significant 21st century workplace as well as a destination for the surrounding communities. Building on the existing site structure and referencing ATP's industrial heritage is key in the creation of a layered and vibrant public offering for the commercial and local populations.*

*Through a series of landscape interventions, the proposal seeks to create a public domain which embraces the following objectives;*

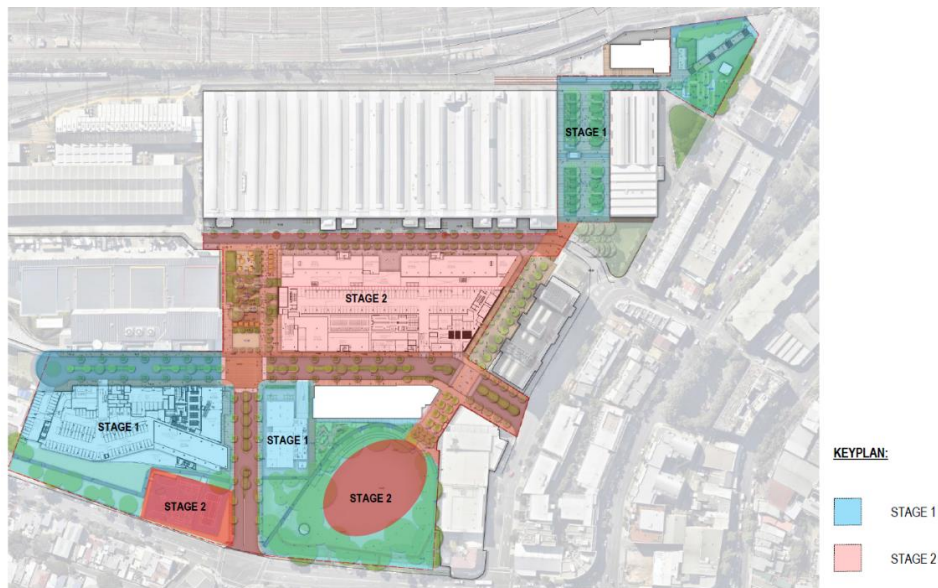
- *Provide a progressive workplace which fosters outdoor working*
- *Create a new hub for the surrounding suburbs of Eveleigh, Redfern and Erskineville, integrated into the local network of streets*
- *Establish The Locomotive Workshop as a destination with a variety of flexible public domain spaces supporting it."*

### 3.3 Development Staging

Subject to commercial and contractual arrangements, the proposal may be developed in two stages (refer to **Figure 30**) generally as follows:

- Stage 1:
  - Building 1;
  - Community Building;
  - Innovation Plaza and northern pedestrian link;
  - Recreational area surrounding Vice Chancellor's Oval; and
  - Central Avenue (western end).
- Stage 2:
  - Building 2;
  - Davy Road;
  - Locomotive Street;
  - Central Avenue (eastern end);
  - Central Plaza;
  - Vice Chancellor's Oval; and
  - Multi-purpose sports courts.

Refer to **Figure 30** for the indicative staging plan prepared by Mirvac. Construction delivery/staging of these specific components is further detailed at Section 3.13.



**Figure 30 – Indicative Development Staging Plan**  
*Source: Mirvac*

### 3.4 Construction Staging

It is proposed that staged construction certificates be obtained for each building and the public domain. The main intent of obtaining staged construction certificates is to minimise the extent of conditions that must be satisfied in order to commence works as soon as practicable following obtaining development consent.

This particularly relates to commencing remediation, civil and in-ground services works, on site, and not being held up in needing to document and detail other aspects of the development that from a timing perspective need not be satisfied until after excavation works commence (i.e. prior to actual construction).

In light of the above it is requested that the Minister accommodate the issuing of staged construction certificates as part of forming conditions of development consent.

To facilitate the staging of the construction process, it is proposed to stage the issuing of Construction Certificates generally as detailed below:

#### Building 1

- Stage 1 – Civil & In-ground Services + Remediation (Sub-structure SoG inclusive)
- Stage 2 – Super-Structure
- Stage 3 – Remaining of Building

#### Building 2

- Stage 1 – Civil & In-ground Services + Remediation (Sub-structure SoG inclusive)
- Stage 2 – Super-Structure
- Stage 3 – Remaining of Building

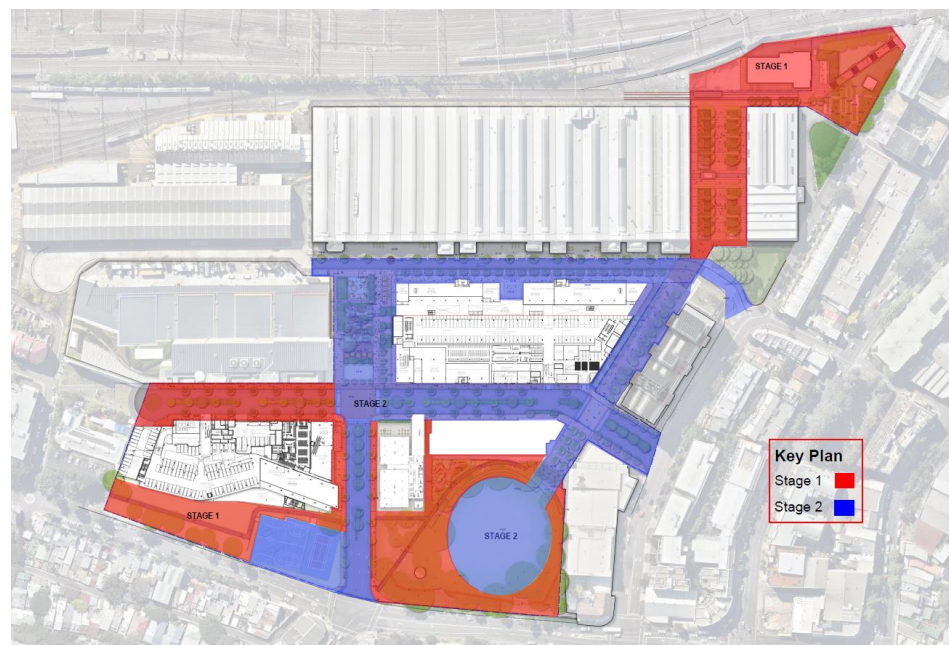
### Community Building

- Stage 1 – Civil & In-ground Services + Remediation (Sub-structure SoG inclusive)
- Stage 2 – Super-Structure
- Stage 3 – Remaining of Building

### Public Domain

- Stage 1
- Stage 2

Refer to **Figure 31**.



**Figure 31** – Indicative Construction Staging Plan  
Source: Mirvac

## 3.5 Site Preparation and Early Works

It is proposed to erect suitable site protection and fencing to secure the site ahead of removal of all existing hard surfaced areas, plantings and car parking infrastructure within the three development zones.

It is proposed to then conduct excavation and earthworks within the development zones to accommodate the proposed structures. Underground infrastructure is proposed to be removed, relocated or augmented as necessary during this phase of early works.

### Remediation

Specifically, this application seeks consent for site remediation works detailed in the Remedial Action Plan prepared by JBS&B (**Appendix M**) and discussed further at Section 5.17. In summary, remedial works for the site as identified by JBS&G include:

- Remediation of excavated material within Lots 8, 9 and 12;
- Off-site removal of impacted fill;



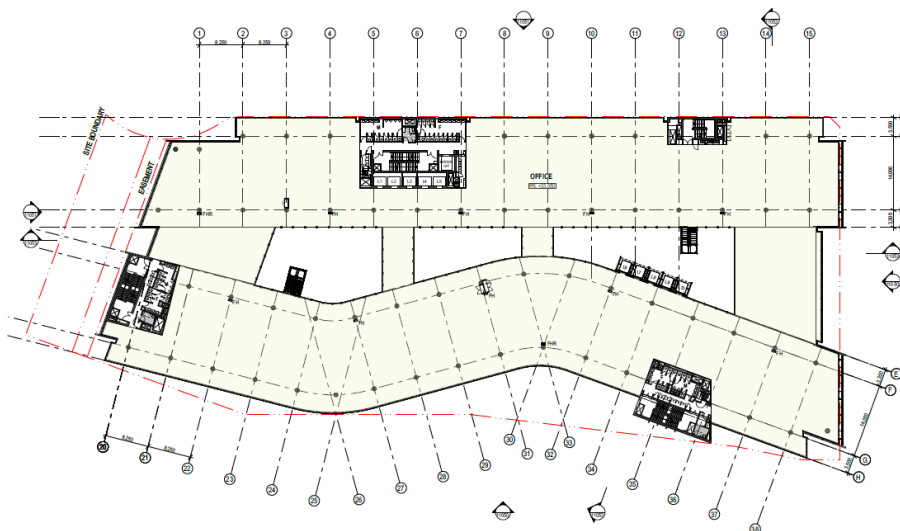
- On-site retain fill management;
- Asbestos management; and
- Tracking, sampling and validation.

## 3.6 Proposed Buildings

### 3.6.1 Building 1

Building 1 is located within the lower, south-western section of ATP within Lot 9. This building is proposed to be a total of 9 storeys (plus rooftop plant) and is to be used primarily as commercial office space with ancillary components including sleeved car parking, child care and retail tenancies, integrated within the built form.

Pedestrian access to the building is gained from the corner of Central Avenue and Davy Road into the office foyer. From here, escalator and lift access is provided into the remainder of the building. Internally, various cores are located within the building providing passenger and service lifts, stairs, amenities, and building servicing and plant.



**Figure 32** – Typical floorplate of Building 1  
Source: FJMT + Sissons

The design of the office space has been led by CBA's desire for campus style collaborative working with a focus on technology. Each typical level is divided into 2 workspace sections by means of internal voids/atriums and which are connected through a series of internal bridges.

A detailed description of the proposed Building 1 is as follows:

#### Lower Ground

The Lower Ground floor is aligned to the finished floor level at the corner of Central Avenue and Davy Road at RL 16.37m AHD. This level contains the following components:

- Office entry foyer within the north-eastern corner of the building at the intersection of Central Avenue and Davy Road, providing escalator and lift access to the upper floors;

- A variety of retail tenancies along Davy Road totalling approximately 310m<sup>2</sup> of GFA;
- Child Care Centre tenancy with an internal area of 841m<sup>2</sup>, located within the south-eastern corner of the building along the Davy Road frontage. External open space attached to the child care tenancy is located to the south of the building, adjacent to Lot 9's interface with the existing pedestrian path and multi-purpose courts;
- End Of Trip facilities and storage for a total 268 bicycle spaces, accessible from Davy Road;
- Car parking for a total of 69 cars sleeved behind retail, office foyer and building plant. It is noted a further 19 external car spaces are located within the western portion of site at the lower ground level; and
- Various service and utility facilities and plant, including storage rooms, substations, pump rooms and the like. In addition, a waste management and a loading dock is located within the north-western section of the building with access from Central Avenue. The loading dock is capable of accommodating 2 x MRVs and 3 x SRVs within service bays.

### Mezzanine

Further parking for 60 cars sleeved by loading dock voids, retail and lobby voids and building plant/services.

### Upper Ground

Office floorspace is located at Upper Ground totalling 3,689m<sup>2</sup> of GFA, which is exclusive of the internal voids/atriums described previously and internal access cores and amenities/building services. An additional 64 car spaces are located within the western portion of the building sleeved by office floorspace.

### Levels 1 to 7

Levels 1 to 7 are allocated as commercial office space and have a common floorplate. These floors generally range in size to be a total of between 5,824m<sup>2</sup> and 6,112m<sup>2</sup> of GFA (typical), which is exclusive of the internal voids/atriums, access cores and amenities/building services. The location of the internal connecting bridges between the two office floor zones vary in positioning level to level.

### Plant and Roof

The building's roof structure is non-trafficable with exception to access for maintenance. The roof zone includes various skylights above the internal atriums. The balance of the roof includes the various plant and HVAC equipment supporting the building.

A photomontage of the proposed Building 1 is provided at **Figure 33**, depicting the building from the intersection of Henderson Road and Davy Road.



**Figure 33** – Photomontage of Building 1 from the corner of Central Avenue and Davy Road  
*Source: FJMT + Sissons*

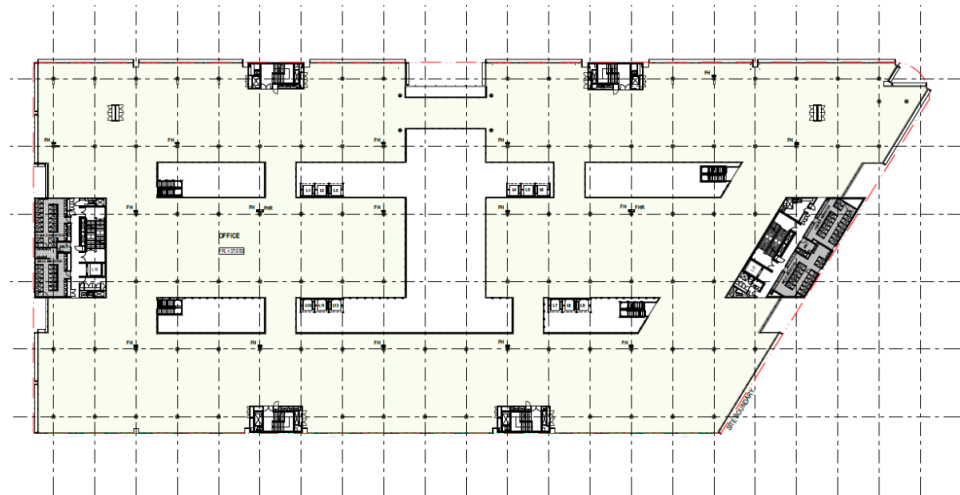
### 3.6.2 Building 2

Building 2 is located within the upper, north-eastern section of ATP within Lot 12. Due to the slope of the allotment, this building is proposed to be a total of 7 storeys fronting Central Avenue and 6 storeys fronting Locomotive Street.

The building is to be used primarily as commercial office space with ancillary components including sleeved car parking retail and supermarket tenancies.

Primary pedestrian access to the building is gained from Locomotive Street, with secondary access from Central Avenue. Both access points lead into foyers with internal lifts and/or escalators. Internally, various cores are located within the building providing passenger and service lifts, stairs, amenities, and building servicing and plant.

As with Building 1, the design of the office space has been led by CBA's desire for campus style collaborative working with a focus on technology. Each typical level is divided into 5 workspace sections by means of internal voids/atriums which are connected through a series of internal bridges. A typical office floorplate is provided at **Figure 34**.



**Figure 34** – Typical office floorplate of Building 2

Source: FJMT + Sissons

A detailed description of the proposed Building 2 is as follows:

### Lower Ground

The Lower Ground floor is aligned to the finished street level of Central Avenue and contains the following components:

- Tenant parking for 225 cars which is sleeved with retail, office foyers and plant.
- Office entry foyer within the south-western corner of the building at the intersection of Central Avenue and Central Plaza;
- Several retail tenancies in a variety of sizes located along Central Avenue, (total GFA of 1,118m<sup>2</sup> of retail within Building 2);
- End Of Trip facilities and storage for a total 318 bicycle spaces off Central Avenue; and
- Various service and utility facilities and plant, including storage rooms, substations, pump rooms and the like. In addition, a waste management room and a loading dock is located within the south-eastern section of the site to the intersection of Central Avenue with Mitchell Way. The loading dock is capable of accommodating 2 x MRVs and 3 x SRVs within service bays.

### Mezzanine

Further parking for 264 cars sleeved by retail and lobby voids and building plant/services.

### Upper Ground

The Upper Ground floor is aligned to the finished street level of Locomotive Street and contains the following components:

- Various retail tenancies and CBA customer facing facilities, generally located along Locomotive Street (total GFA of 971m<sup>2</sup> of retail within Building 2);
- Office floorspace sleeved by retail/commercial tenancies and CBA client services. This floor provides a total of 9,396m<sup>2</sup> of GFA including retail, which is exclusive of the internal voids/atriums described previously and internal access cores and amenities/building services.



## Levels 1 to 4

Levels 1 to 4 are allocated as commercial office space and have a common floorplate. These floors each provide a total 9,286m<sup>2</sup> of GFA, which is exclusive of voids/atriums, access cores and amenities/building services.

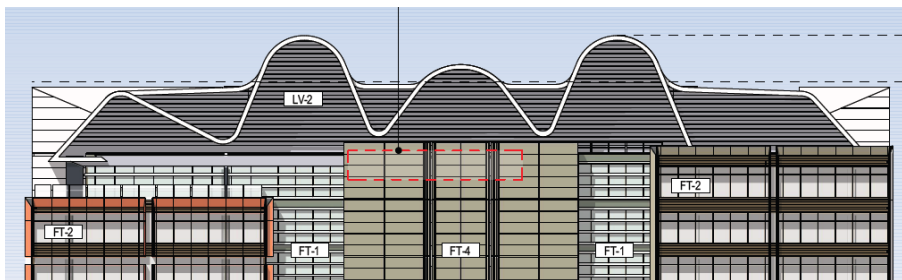
## Level 5

Level 5 is allocated as commercial office space and has a slightly reduced floorplate when compared to the lower office levels. This floor contains a total GFA of 8,071m<sup>2</sup>, which is exclusive of internal voids/atriums, access cores and amenities/building services. This level also provides four external terraces along the northern elevation of the building.

## Roof

Building 2 includes an architectural roof feature which has been integrated within the over overall structure. The building's roof structure is non-trafficable with exception to access for maintenance. The roof feature itself includes various skylights above the internal atriums with the balance including various plant and HVAC equipment supporting the building.

The western elevation of Building 2, including the proposed roof feature is shown below at **Figure 35** with a photomontage of the proposed Building 2 is provided at **Figure 36**, depicting the building from western end of Locomotive Street.



**Figure 35** – Western elevation of the proposed Building 2  
Source: FJMT + Sissons Architecture



**Figure 36** – Photomontage of Building 2 as viewed from Locomotive Street  
Source: FJMT + Sissons

### 3.6.3 Community Building

The Community Building is located within the southern section of the site, between Davy Road and the existing Biomedical building. The proposed Community Building is to be a total of 4 storeys which comprises varied uses including, a retail tenancy, gym, commercial office, community and child care.

The building incorporates a services/utility area in the eastern section of the building. This area also includes amenities and vertical access via dual lifts and stairs. In addition, the building is proposed to incorporate two forced ventilation shafts which extend down from the roof through each level to ground, providing natural ventilation and air circulation.

A detailed description of the proposed Community Building is as follows:

- Ground - the building incorporates an open plaza oriented to the north and towards Central Avenue. This plaza is located adjacent to the retail tenancy which totals 340m<sup>2</sup>. The centre of the building provides the primary access to the upper floors. Within the southern portion of the building fronting Davy Road is a gym tenancy which totals 450m<sup>2</sup> and a corner retail tenancy of 41m<sup>2</sup>;
- Level 1 – dedicated to Child Care use with a total internal GFA of 794m<sup>2</sup> on Level 1 and external terrace area of 660m<sup>2</sup>;
- Level 2 – dedicated for community-based uses with a total GFA of 1,082m<sup>2</sup> with the addition of northern and southern terraces;
- Level 3 – dedicated to commercial office floorspace, totalling 1,082m<sup>2</sup> GFA, with northern and southern terraces.
- Roof – a non-trafficable area and contains the ventilation skylights and rooftop PV cells.

A photomontage of the Community Building is provided at **Figure 37**.



**Figure 37** – Photomontage of the Community Building from Davy Road and Central Avenue  
Source: FJMT + Sissons Architects

## 3.7 Building Fit-out and Use

### 3.7.1 CBA Floorspace

The proposed CBA floorspace is to be used as a new collaborative technology and innovation campus. The fit out and use of the floorspace will be undertaken via separate approval.

CBA is committed to fitting out the proposed floorspace with the latest features to maximise information technology systems for their workers to enable smarter and more efficient working. Through the design of the base buildings, CBA will be afforded maximum internal flexibility to ensure the space is innovative in its design and takes advantage of the various zones created by the series of internal voids and interconnecting bridges.

It is Mirvac and CBA's joint vision to create truly collaborative workspaces which are highly desirable places for both workers and visitors alike.

### 3.7.2 Retail Tenancies

Mirvac is committed to a total regeneration and renewal of the ATP precinct. To add vibrancy and life to the surrounding area and to support the new workforce proposed for ATP, this SSDA includes the following retail/food and drink tenancies within the three buildings and the GFA:

- Building 1: 314m<sup>2</sup>
- Building 2: 2,095m<sup>2</sup>; and
- Community Building: 381m<sup>2</sup>

At the present time, Mirvac and CBA are in negotiations for the specific mix of retail tenancies and facilities desired to support CBA's occupation. The final mix of tenancies and their specific fit-out and uses will be undertaken via separate approval.

### 3.7.3 Supermarket Tenancy

Within the Building 2 retail offering is planned to be a supermarket tenancy, expected to be in the order of 600m<sup>2</sup>. This tenancy is planned to be focused along the Central Avenue frontage.

The supermarket is proposed to operate 24 hours, 7 days per week. Public access to the supermarket will be from Central Avenue with servicing of the supermarket provided internally with a corridor connecting to the building's loading dock.

This SSDA seeks approval for the use and hours of operation of the supermarket, however the fit out of the supermarket floorspace will be undertaken via a separate approval process.

### 3.7.4 Gym Tenancy

The Community Building within the southern section of the site includes a gym tenancy. This tenancy is located within the ground floor overlooking the Vice Chancellor's Oval and totals 450m<sup>2</sup>. This application seeks the fitout and use of the gym facility proposed. Proposed fit-out details are included within **Appendix B**.

This gym is proposed to operate 24 hours, 7 days per week. The facility will be staffed during business hours for consultations, administration and membership enquiries.

After business hours, access is proposed to be via secure swipe card, for member's use only. Security patrols will be undertaken via the on-site precinct security staff as part of the operation of the entire ATP.

Car parking for the general public associated with the gym is accommodated within the 42 new on-street spaces proposed through ATP. It is expected the most users of the new gym will be workers or local residents and therefore will walk to the gym.

### 3.7.5 Child Care Centre Tenancies

The proposal includes the following child care facilities within the proposal:

- Building 1: 841m<sup>2</sup> internal and 660m<sup>2</sup> external; and
- Community Building: 794m<sup>2</sup> total internal and 660m<sup>2</sup> external terrace.

Both child care centres have undergone detailed design to ensure that sufficient floorspace and support facilities have been included to cater for a total of 90 children per centre in varying ages.

This application seeks the fitout and use of the Child Care facilities proposed. Proposed fit-out details are included within **Appendix B**. Certification has been provided at **Appendix Y** that the design of the proposed child care facilities meet all relevant requirements, standards, regulations, etc.

Hours for the childcare within Building 1 and the Community Building will be 7am to 7pm Monday to Saturday. Along Davy Road, on-street, short street drop off and pick up zones will service the childcare centres.

The management for the childcare centres will be via an experienced childcare operator, who has not been selected at this point.

### 3.7.6 Community Floorspace

The Community Building within the southern section of the site includes a component of community office floorspace at the second floor totalling 1,082m<sup>2</sup>.

This also includes both a northern and southern terrace. This community floorspace is key in Mirvac and CBA's commitment in contributing to the ATP precinct, through GFA which is suitable as business/commercial incubator or start-up space and will be designed as a commercial space. This will give the opportunity for new ideas and innovation to be fostered in close proximity of some of the leading financial, media and research facilities within Australia.

## 3.8 Landscaping and Public Domain

Public Domain Drawings have been prepared by Aspect Studios and are provided at **Appendix C**.

Key design principles utilised by Aspect in formulating their scheme for the ATP site include connection, activation, diversity, identity, sustainability and safety. These principles strive to create a development which is both responsive to the existing site conditions and heritage, but also integrates and supports the new buildings and other site enhancements. A masterplan extract is provided at **Figure 38**.





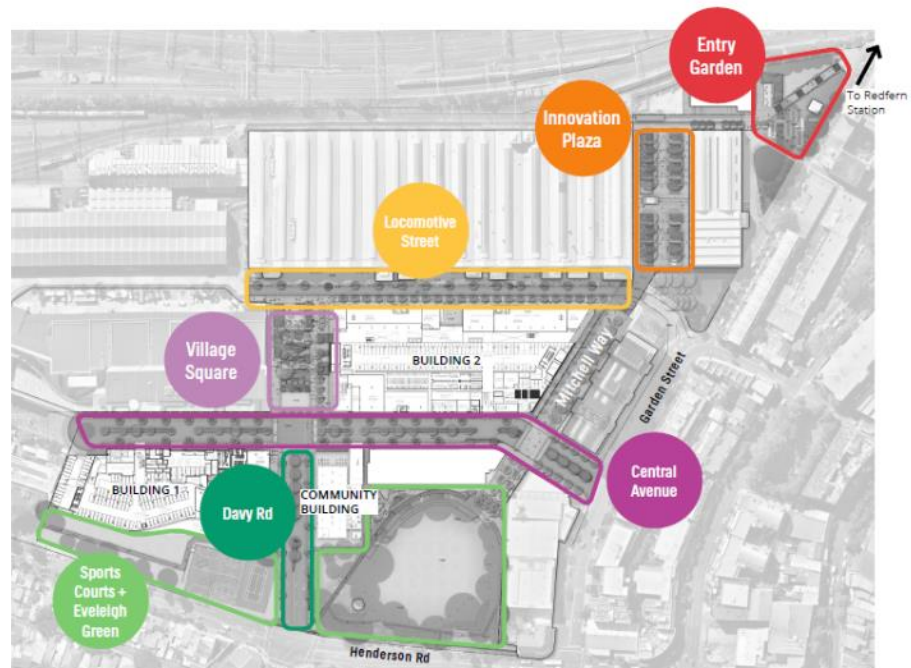
**Figure 38 – ATP urban regeneration masterplan**  
*Source: Aspect Studios*

### Site Structure

The design strategy for ATP involves the formation of consolidated public open space precincts, each activated through the inclusion of social infrastructure, heritage interpretation or recreational facilities. The primary public domain spaces are as follows (refer to **Figure 39**):

- Innovation Plaza;
- Locomotive Street;
- Village Square;
- Central Avenue;
- Davy Road;
- Mitchell Way;
- Eveleigh Green; and
- Sports Courts.





**Figure 39** – Proposed site structure and key public domain precincts  
 Source: Aspect Studios

## Materiality

Existing precinct has a range of disparate materials that do not promote connectivity or match the proposed built form. The proposal seeks to selectively upgrade the paved areas to improve legibility and the general urban design quality of ATP together with the new built form. Aspect proposes the following key materials:

- Brick;
- Compressed Gravel & Garden Beds;
- Asphalt Road & Paths;
- Porphyry; and
- Concrete.

## Heritage Interpretation

The rich heritage character of the site provides many opportunities to celebrate the Locomotive Sheds and ATP's historical industrial character. The proposed public domain improvements will compliment and amplify the site's history through appropriate material selections.

Further, the existing heritage artefacts throughout the site, particularly within and surrounding Innovation Plaza, are to be retained and will complement the repurposed ATP building zones.

## Public Furniture

The proposal will include various public furniture components includes fixed and loose cafe seating, shared tables, street furniture and feature furniture showcasing the site's heritage assets.

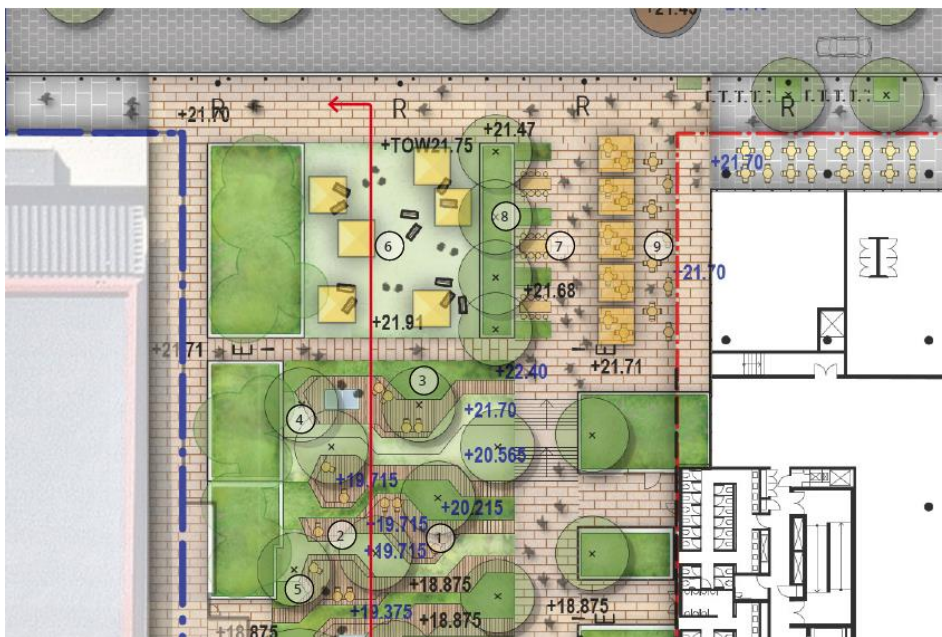
## Planting and Trees

A variety of tree, shrub and ground covers have been appropriately selected and located to provide shade and wind protection, define the hierarchy of streets, reduce maintenance and maintain key views. Key components of the proposed planting include:

- Tall feature trees within street medians on Davy Road and Central Avenue;
- Ornamental garden plantings and structural feature planting in Central Plaza and Innovation Plaza;
- A sensory children's garden with fragrant and textural planting adjacent to the Vice Chancellor's Oval; and
- Variety of low and dense mass plantings within the northern entry to the site and along Central Avenue and Davy Road.

## Public Open Spaces

- Village Square:
  - Revitalised Central Plaza precinct which is focused on improving the pedestrian experience and improving priority; and
  - New paving will replace asphalt areas and upgrades to lighting, seating and plantings will improve the connection and integration of the proposed new buildings with Media City, to the west of Building 2.



**Figure 40** – Proposed upgrades to public open space in Central Plaza  
Source: Aspect Studios

- Innovation Plaza:
  - Retention of the existing avenue of double mature trees and upgrade and decluttering of planters, seating and aged fixtures;
  - New break-out spaces are proposed through new seating, planters to support individual and group interaction; and
  - New lighting to ensure a visible and safe primary access point from ATP through to Redfern Station.

- **Sports Courts & Eveleigh Green:**
  - Existing trees to be pruned to improve views and to allow the planting of new understory trees and shrubs;
  - New public seating/tables and outdoor exercise equipment; and
  - Resurfacing and remarking of sports courts to improved quality and to address the varied needs of multiple users.



**Figure 41** – Proposed upgrades to the Vice Chancellor's Oval and surrounds  
Source: Aspect Studios

- **Entry Plaza:**
  - Improvements to paving quality, disabled access and prioritisation of pedestrian movements; and
  - Additional plantings and improvements to lighting and wayfinding.

## Streetscapes

- **Locomotive Street:**
  - Removal of on-street parking and rationalisation of the street and pavement to maximise and prioritise pedestrian movements; and
  - Rhythm of new street tree plantings, lighting and furniture.
- **Central Avenue:**
  - Improvements; to tree plantings and upgrades to paving to increase pedestrian permeability and to encourage activation.
- **Davy Road:**
  - Reduction of road width and corresponding increase width of pedestrian paths; and
  - Additional plantings and improved lighting and wayfinding.

## 3.9 Access, Traffic and Parking

### 3.9.1 Pedestrian Access

Pedestrian access points to the ATP site are proposed to remain as existing, being to and from Cornwallis Street (north), Garden Street (east), Henderson Road (south) and Alexander Street (west). Through-site linkages will also remain.

However, these connections are to be embellished as described throughout Section 3.8 to cater for the significant increase in workers and visitors to ATP and to improve their general quality. In particular, high pedestrian traffic areas such as Innovation Plaza and Locomotive Street through to Redfern Station will be prioritised as pedestrian precincts with attractive paving, additional plantings, new furniture and where necessary, removal of on-street parking.

Pedestrian access through the ATP within the public domain areas (including those proposed to be upgraded) will remain and will be formalised through an easement for a public access/thoroughfare within PT 4007.

### 3.9.2 Vehicular Access and Parking

Primary vehicular access remains as existing, with the key street access from Davy Road and Central Avenue providing through vehicular movement within the site. The street network will be optimised in conjunction with the proposed pedestrian upgrades to provide vehicular access to:

- Building 1 car parking via a basement ramp from the western portion of Central Avenue, with an adjacent entry to an at-grade loading dock;
- Building 2 car parking via a basement ramp from the eastern portion of Central Avenue, with an adjacent entry to an at-grade loading dock; and
- Community Building does not require vehicular access as no on-site parking is provided.

Vehicular access into the car parks will be provided via two way entry/exits and will be managed by security boom gates and roller doors.

Locomotive Street is proposed to have a reduced vehicular dominance through the removal of informal on-street parking and limiting the use of this street for essential deliveries only. In addition, 42 new car spaces are proposed to be accommodated within Central Avenue and Davy Road within new and/or reconfigured indented parking bays. These on-street car spaces are proposed to be time-limited and will generally cater for visitors to the ATP site.

## 3.10 Environmentally Sustainable Design

Environmentally sustainable design measures within the ATP site will be implemented on a precinct-wide basis to ensure that the overall development achieves a standard of environmental performance which is commensurate to the scale and importance of the new facilities.

To this end, the Mirvac's ATP redevelopment for CBA for Building 1 and 2 has been designed to achieve a NABERS benchmark of 5 stars for energy and 4 stars for water, with a 6 star Green Star Design (as built).

As such, the following areas will be the main focus of the design team:

- Energy – reduce energy use and greenhouse gas emissions. The buildings' envelope and services have been integrated to ensure the building is



controlled to maintain the desired conditions whilst optimising the energy efficiency of the complex;

- Indoor Environmental Quality – design the buildings to maximize occupant comfort addressing issues of thermal and visual comfort and indoor air quality;
- Water – minimize potable water consumption and optimise the water efficiency of the development;
- Materials – minimize waste, encourage reuse and recycling of materials and use low environmental impact materials;
- Transport – encourage more energy efficient and less polluting forms of transport to and from the site; and
- Benchmarking – The buildings are to be designed to achieve a minimum NABERS Energy and Green Star Design and As-Built v1.1 rating.

### 3.11 Signage

The proposal seeks approval for ancillary building identification signage zones across the buildings, as identified on the elevations within the Architectural Drawings (**Appendix B**).

Details of the exact content, materiality, and illumination etc. of signs within these zones will be the subject of approval by the Director General prior to the issue of the relevant construction certificate.

### 3.12 Infrastructure and Utilities

#### Lot 8 (Community Building)

Civil, infrastructure and utilities works and upgrades proposed within Lot 8 include:

- Stormwater: Demolition of existing pipes servicing the car park stormwater network, connection of stormwater generated within the Community Building to the south to the existing detention basin;
- Water: Connection to Locomotive Street water main;
- Sewerage: Connection to existing sewer within Davy Road;
- Communications: Extension and augmentation of lines adjacent to the Biomedical building;
- Gas: Connection with Jemena owned main within Central Avenue ; and
- Electricity: Connection with high and low voltage feeders located within Central Avenue and Davy Street.

#### Lot 9 (Building 1)

Civil, infrastructure and utilities works and upgrades proposed within Lot 9 include:

- Stormwater: Demolition of existing pipes servicing the car park, relocation of existing pipes and connection of stormwater generated within Building 1 to the existing network within Central Avenue;
- Water: Potential removal of an existing Sydney Water main through the western edge of the lot and potential upgrade and connection to Alexander Street main;
- Sewerage: Connection to existing sewer within Central Avenue;



- Communications: Connection to existing lines in Central Avenue;
- Gas: Extension and connection of Jemena owned main within Central Avenue to the west of Davy Road; and
- Electricity: Connection with high and low voltage feeders located within Central Avenue and Davy Street and relocation/replacement of streetlight poles.

### Lot 12 (Building 2)

Civil, infrastructure and utilities works and upgrades proposed within Lot 12 include:

- Stormwater: Demolition of existing pipes servicing the car park stormwater network and connection of stormwater generated within Building 2 to the existing network within Central Avenue;
- Water: Removal of non-potable water infrastructure in the site and connection to Sydney Water main at corner of Mitchell Way and Central Avenue;
- Sewerage: Connection to existing sewer within Locomotive Street;
- Communications: Connection to existing lines in Central Avenue and Locomotive Street;
- Gas: Connection with existing Jemena owned main within Central Avenue and/or Central Avenue; and
- Electricity: Connection with high and low voltage feeders located within Central Avenue and Davy Street.

For further details of the proposed works in relation to infrastructure and utilities, refer to Civil Infrastructure Report and Plans by AT&L provided at **Appendix N**.

## 3.13 Construction Management

A Construction and Environmental Management Plan (CEMP) has been prepared by Mirvac for the ATP Site (**Appendix W**). The CEMP outlines the actions and staging of construction deemed necessary to address the concerns of neighbouring properties, authorities and the requirements of the proposed anchor tenant (CBA), whilst maintaining a safe and productive construction site with efficient surrounding pedestrian/traffic movements.

In particular, construction activities are sought between the hours of:

- Monday to Friday – 7am to 6pm; and
- Saturday – 7am to 5pm.

There will be no construction works on Sundays and Public Holidays.

## 3.14 Waste Management

A Waste Management Plan has been prepared by Waste Audit and is provided at **Appendix X**. This plan establishes the operational procedures which will ensure that waste is effectively managed throughout the life of the development.

Within all buildings waste will be collected by cleaners and will be sorted from each level at an interim cleaner's room within the service core(s). Waste will then be transported directly to the waste management rooms within each building. Within Buildings 1 and 2 this will be via service lift adjacent to the loading docks and in the Community Building via a general lift.

Collection of general waste and sorted recyclables will be carried out by a private contractor, to be engaged once the proposal is operational. It is expected that the development will require the following bins (1100L MGB) to be emptied each weekday:

- Building 1: General Waste (4), Recycling (4);
- Building 2: General Waste (7), Recycling (7); and
- Community Building: General Waste (1), Recycling (1).

In addition to this, 1x 240L MGB for general waste and 1x for recycling will be required for each child care tenancy. Additional bins for the retail, supermarket and gym tenancies are capable of being added to the waste rooms and added to the overall waste collection program.

In addition, tenancy specific programs are recommended for the following specific waste types:

- Fluorescent Light Tubes;
- Toner Cartridges;
- E-waste and mobile phones; and
- Used cooking oil.

### 3.15 Facility Management

A consortium led by Mirvac, including AMP Capital and Sunsuper, has been selected as the successful purchaser of ATP. Mirvac is the developer, builder and long term owner of the precinct.

Mirvac is also the land owner of the Locomotive Workshop, as well as the entire public domain within ATP. Centuria Property Funds has acquired the Media City building, the Biomedical Building, the NICTA Building and the International Business Centre. To ensure cohesion across the precinct, Mirvac has been appointed as the Precinct Manager for ATP.

## 4.0 Consultation

Mirvac engaged JBA to provide communications and stakeholder engagement services for the project. The consultation program included engagement with the local community, neighbours and key stakeholders to present the proposal and gather feedback.

The consultation activities were designed to address the Secretary's Environmental Assessment Requirements, ensure that all stakeholders were informed about the proposal and had the opportunity to provide feedback prior to the submission of the State Significant Development Application (SSDA). The feedback received during the initial consultation process has been considered during the preparation of the SSDA.

The pre-lodgement communications and stakeholder engagement activities included:

- Stakeholder meetings with relevant authorities, agencies and organisations, including consultation meetings with Australian Technology Park tenants and key local community groups.
- Establishing a project email and phone number for the public to request more information and ask questions about the proposals.
- Presenting the plans and answering questions at public information sessions hosted by Urban Growth on 17 and 19 November 2015.
- Postcard distribution to 7,000 surrounding residents on 3 December 2015 and businesses to notify them of the project, invite them to attend the information session and advise them of the phone and email contact details for more information.
- Newspaper advertisement in the Central Courier on 2 December 2015 to advise the wider community of the project, the planned public information session and the phone and end email contact details for more information.
- A community information session at the Australian Technology Park on 10 December 2015 to enable the wider community to view the plans and provide feedback.
- An information stall at the Australian Technology Park Heritage Open Day on 12 December 2015 to provide further consultation opportunities for the project.
- Creation of a four page project brochure which was distributed at the information session and heritage open day.

A Consultation Summary Report has been prepared by JBA (**Appendix U**) detailing these activities, key issues discussed with communities and stakeholders in relation to the plans and the feedback received. The Report will be updated to include feedback received from consultation activities held during the public exhibition period after lodgement of the SSDA.

## 5.0 Environmental Assessment

This chapter contains our assessment of the environmental effects of the proposed development as described in the preceding chapters of this report.

Under Section 79C(1) of the EP&A Act, in determining a development application the consent authority has to take into account a range of matters relevant to the development including the provisions of environmental planning instruments; impacts of the built and natural environment, the social and economic impacts of the development; the suitability of the site; and whether the public interest would be served by the development. The assessment includes only those matters under Section 79C(1) that are relevant to the proposal. The planning issues associated with the proposed development are listed in **Table 3** below.

**Table 3** – Planning Issues

Planning Issues	Assessment	
	EIS	Technical Study
Secretary's Environmental Assessment Requirements	Section 5.1	-
Environmental Planning and Assessment Act 1979	Section 5.2	-
Compliance with Planning Policies	Section 5.3	-
Compliance with Environmental Planning Instruments	Section 5.4	-
Built Form and Design Quality	Section 5.5	Appendix B
GFA Distribution and Land Use Mix	Section 5.6	Appendix B
Public Domain and Urban Design	Section 5.7	Appendix C
Transport, Traffic and Access	Section 5.8	Appendix F
European and Aboriginal Heritage	Section 5.9	Appendix G
Accessibility	Section 5.10	Appendix R
Noise and Vibration	Section 5.11	Appendix H
Civil Infrastructure and Utilities	Section 5.12	Appendix N
Railway Infrastructure	Section 5.13	Appendix K
Operational Waste Management	Section 5.14	Appendix X
Water Cycle Management	Section 5.15	Appendix N and P
Geotechnical	Section 5.16	Appendix K
Contamination	Section 5.17	Appendix L and M
Wind Impacts	Section 5.18	Appendix I
Reflectivity	Section 5.19	Appendix J
BCA and Fire Safety	Section 5.20	Appendix S and Q
Social and Economic Impact	Section 5.21	-
Crime and Public Safety	Section 5.22	Appendix T
Environmental and Construction Management	Section 5.23	Appendix W
Ecologically Sustainable Development	Section 5.24	Appendix P
Development Contributions	Section 5.25	-
Site Suitability	Section 5.26	-
Public Interest	Section 5.27	-

## 5.1 Secretary's Environmental Assessment Requirements

The Secretary's Environmental Assessment Requirements in Section 1.5 provides a summary which sets out the individual matters listed in the SEARs and identifies where each of these requirements have been addressed in this report and the accompanying technical studies.

## 5.2 Environmental Planning and Assessment Act 1979

### State Significant Development

The EP&A Act establishes a specific assessment system to consider projects classed as State significant development (SSD). SSD is development deemed to be of significance to the State and for example includes projects located in precincts regarded as important by the NSW Government, such as Eveleigh and Australian Technology Park. As noted, the proposed development the subject of this DA is classed as SSD.

This EIS has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed development. **Table 4** provides an assessment of the proposed development against the objects of the EP&A Act. **Table 5** provides an assessment of the proposal against the matters for consideration listed in section 79C of the EP&A Act.

**Table 4 – Objects of the EP&A Act 1979**

Object	Comment
5(a)(i) To encourage 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.	The proposal will contribute to the proper management, development and conservation of the natural and artificial resources of the ATP site. In particular, a range of measures outlined in the Ecologically Sustainable Development Report prepared by ARUP and included as <b>Appendix P</b> will be implemented to ensure the conservation of natural resources throughout the construction and operational phases, and existing artificial resources and infrastructure will be retained where practicable. The development of ATP will contribute to the conservation of energy and water resources, a reduction in construction and operational waste generation and will promote the welfare of future building occupants by ensuring a high level of indoor environmental quality.
5(a)(ii) To encourage the promotion and co-ordination of the orderly economic use and development of land.	The proposed development involves the orderly redevelopment of undeveloped portions of the ATP site for the provision of a high-technology and collaborative hub for CBA, together with varying supporting uses. The proposal will promote economic growth and make greater use of an underutilised and highly accessible site in a prime CBD fringe location.
5(a)(iii) To encourage the protection, provision and co-ordination of communication and utility services.	The Infrastructure Services Report ( <b>Appendix N</b> ) determines that the proposed development would not impact on the provision or coordination of communication and / or utility services. Relevant utility providers have been consulted during the design of the proposal.
5(a)(iv) To encourage the provision of land for public purposes.	The proposal includes the significant works to embellish and upgrade the existing public domain areas within the ATP site. These upgrades not only benefit the proposed new workforce as a result of the proposal but will also benefit the existing users of ATP and the wider community. The substantial proportion of the site remaining as public realm will in perpetuity continue to be accessible by the public.



Object	Comment
5(a)(v) To encourage the provision and co-ordination of community services and facilities.	The proposal supports the provision of community services through dedicated floorspace and other facilities such as gym and child care within central and easily accessible locations.
5(a)(vi) To encourage 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.	The proposal will be undertaken in a highly modified and disturbed urban environment, and will not impact on biodiversity values. The ATP site is not considered to have habitat suitable for any threatened flora and fauna.
5(a)(vii) To encourage ecologically sustainable development.	The proposed development accords with the principles of Ecologically Sustainable Development, as set out in Schedule 2 of the EP&A Regulation 2000. This is further considered in Section 5.24 of this EIS.
5(a)(viii) To encourage the provision and maintenance of affordable housing.	The proposed development will contribute towards the provision of affordable housing (supporting the delivery of approximately 17 affordable housing units) – through the affordable housing levy.
5(b) To promote the sharing of the responsibility for environmental planning between different levels of government in the State.	Extensive consultation has been undertaken with various levels of government and government agencies during the preparation of this proposal, and all government agencies will be afforded the opportunity for further input into the development process during the public exhibition process.
5(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.	The community consultation carried out assisted the development of the proposal and is detailed in Section 4.0 of this EIS. Further consultation will be carried out prior to the commencement of construction and throughout the construction period.

Table 5 – Assessment of matters for consideration in section 79C

Matter for Consideration	Comment
In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application: (a) the provisions of: (i) any environmental planning instrument, and	The proposal is consistent with the relevant environmental planning instruments as set out in Section 5.4.
(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and	The proposal is consistent with all relevant proposed environmental planning instruments which have been the subject of public consultation as set out in Section 5.4.
(iii) any development control plan, and	Not applicable.
(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and	No planning agreement or draft planning agreement is in place and therefore this matter for consideration is not relevant.
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and	The proposed SSDA is consistent with the relevant regulations, in particular Schedule 2 of the EP&A Regulation.
(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,	No coastal zone management plan applies to the site and therefore this matter for consideration is not relevant.
(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,	The proposal will not have any significant adverse environment, social or economic impacts which cannot be managed or mitigated. A full environmental assessment is provided throughout Section 5.0 and an environmental risk assessment is provided in Section 6.0. A detailed list of mitigation measures is provided in Section 7.0.

Matter for Consideration	Comment
(c) the suitability of the site for the development,	The ATP site is suitable for the proposed development as outlined in Section 5.26.
(d) any submissions made in accordance with this Act or the regulations,	The proposal has not yet been publically exhibited, and therefore no submissions have been made. Consultation has been undertaken and issues raised have been dealt with in the design of the proposal.
(e) the public interest.	The proposal is in the public interest as it will provide significant benefits in regard to social, economic and environmental considerations. Further details of how the proposal is in the public interest are provided at Section 5.27.

### 5.3 Compliance with Planning Policies

The proposal's consistency with the relevant strategies, policies and guidelines as set out in the SEARs is addressed in **Table 6**.

**Table 6** – Consistency with relevant strategies, policies and guidelines

Instrument/Strategy	Comments
<b>Strategic Plans</b>	
A Plan for Growing Sydney	The proposal is consistent with the Strategy in that it will: <ul style="list-style-type: none"> <li>▪ Deliver new high-technology commercial office floorspace within the fringe of the Sydney CBD and along the Central to Eveleigh Corridor;</li> <li>▪ Support the development of the Global Economic Corridor;</li> <li>▪ Undertake urban renewal adjacent to a key transport corridor;</li> <li>▪ Revitalise and improve the amenity of ATP, to create a vibrant centre where people want to spend time; and</li> <li>▪ Assist in the implementation of UGDC strategy for the precinct.</li> </ul>
Sydney 2030 (City of Sydney Council)	This planning proposal will facilitate the site's regeneration and in doing so will deliver new commercial opportunities in an inner urban area with good access to existing transport networks. It will therefore help reinforce the city's global role and identity by contributing to its urban renewal in a sustainable manner and will support the creation of a new vibrant, creative and diverse community in the local area.
Development Near Rail Corridors and Busy Roads-Interim Guideline	The proposal has been assessed against the Development Near Rail Corridors and Busy Roads-Interim Guideline. This assessment is outlined in the Noise and Vibration Report ( <b>Appendix H</b> ). Potential impacts on Sydney Train Infrastructure (i.e. Illawarra Line Tunnels) is addressed in <b>Appendix K</b> .
Guide to Traffic Generating Developments (RMS)	Refer to the Transport Impact Assessment prepared by GTA Consultants ( <b>Appendix F</b> ).
NSW Planning Guidelines for Walking and Cycling	The proposed development will improve walkability and cycle access across the Redfern-Waterloo precinct through the provision of enhanced routes, active transport facilities, and wayfinding signage. The proposed development will improve connectivity to the surrounding street network and the wider area, consistent with the guidelines.
NSW Long Term Master Plan	The proposal provides a dense innovation and technology commercial development which has been appropriately integrated in an area which is well served by public transport. Improved access to the Redfern Station has been prioritised through targeted public domain upgrades. These measures are consistent with key goals within the NSW Long Term Master Plan.
Redfern Waterloo Built Environment Plan (Stage One) August 2006	Refer to Section 5.4.5.
Sydney Development Control Plan 2012	The provisions of the Sydney DCP 2012 do not strictly apply to the proposed development given it is a State Significant Development Application. Further, the ATP land is not covered by the DCP in any

Instrument/Strategy	Comments
	event. Nonetheless, the proposal has had regard to the objectives and intent of the Sydney DCP 2012.
Redfern Waterloo Authority Contributions Plan 2006	The proposal's development contributions are further discussed within Section 5.25 of this EIS.
Redfern Waterloo Authority Affordable Housing Contributions Plan 2006	As above, refer to Section 5.25.
Sydney's Cycling Future Sydney's Walking Future	The proposal provides enhanced public domain and accessibility throughout the ATP precinct. This includes improvements to materiality and way finding for both pedestrians and cyclists and ensuring through-site movements are retained. Further, extensive End-Of-Trip facilities have been accommodated within the proposed buildings together with additional public bicycle parking. All of these measures are consistent with the State's plans for walking and cycling.

## 5.4 Compliance with Environmental Planning Instruments

The proposal's consistency and compliance with the relevant statutory plans and policies is summarised in **Table 7** or discussed in more detail below.

**Table 7** – Consistency with relevant environmental planning instruments

Instrument	Comments
SEPP (State & Regional Development) 2011	Pursuant to the SEPP a project within the Redfern-Waterloo site will be SSD if it has a capital investment value (CIV) of \$10 million or more (Schedule 2). The proposed development has a CIV of over \$10 million, and is therefore identified as SSD and considered to be development of State and/or Regional Significance. Accordingly, this EIS has been prepared in support of the DA.
SEPP (Major Development) 2005	Refer to Section 5.4.1.
SEPP (Infrastructure) 2007	Refer to Section 5.4.2.
SEPP (Urban Renewal) 2010	The SEPP relates to development within potential priority precinct zones and has a CIV of more than \$5 million. The proposal is consistent with the provisions of the SEPP in that it directly supports high density commercial development within the precinct, and does not restrict access to or prevent infrastructure, other facilities and public domain/public transport to be implemented.
SEPP 1 (Development Standards)	Under SEPP (Major Development) the proposal does not comply with the gross floor area development standard and the height of buildings development standard (in part), being Clause 21(1) and Clause 21(2A). SEPP 1 Objections are accordingly proposed, included at <b>Appendix D</b> , which demonstrate compliance with the standards are unnecessary and unreasonable.
SEPP 55 (Remediation of Land)	<p>Clause 7 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated and if the land is contaminated, it is satisfied that the land is/can be suitable for the proposed development. Extensive contamination studies have been prepared over the years, including in relation to the proposed development (refer to <b>Appendix L</b>).</p> <p>A site-wide Remedial Action Plan has been prepared for the Site by JBS&amp;G and is included as <b>Appendix M</b>. The Plan has been summarised in Section 5.17 of this Report. In summary, the Plan considers that the Site can be made suitable for the proposal/future uses and outlines strategies to ensure that the requirements of SEPP 55 are appropriately addressed.</p>
SEPP 64 (Signage)	Refer to Section 5.4.4.
Sydney Local Environmental Plan 2012	The Sydney Local Environmental Plan 2012 is not applicable to the site.

### 5.4.1 SEPP (Major Development) 2005

*State Environmental Planning Policy (Major Development) 2005* seeks to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant sites for the benefit of the State.

Clause 7 of SEPP (Major Development) denotes the site as being State Significant and defers to Schedule 3, Part 5 for specific provisions within Redfern-Waterloo.

**Table 8** provides a response to the relevant and applicable provisions of the SEPP under this Part.

**Table 8 – SEPP (Major Development) 2005: Schedule 3, Part 5 – Compliance Table**

Provision	Compliance
<b>Subclause 3 - State significant sites</b>	
All other environmental planning instruments do not apply to the Redfern-Waterloo Authority Sites, except for other State environmental planning policies.	Noted.
<b>Subclause 8 – Business Zone – Business Park</b>	
<p>The objectives of the zone are as follows:</p> <ul style="list-style-type: none"> <li>a) to establish business and technology parks to encourage employment generating activities that provide for a wide range of business, technology, educational and entertainment facilities in the Zone,</li> <li>b) to support development that is related or ancillary to business, technology or education,</li> <li>c) to support development for retail uses that primarily serve the needs of the working population in the Zone and the local community,</li> <li>d) to ensure the vitality and safety of the community and public domain,</li> <li>e) to ensure buildings achieve design excellence,</li> <li>f) to promote landscaped areas with strong visual and aesthetic values to enhance the amenity of the area.</li> </ul> <p>Commercial premises, community facilities, recreation facilities and child care facilities are all permitted land uses within the zone.</p>	<p>The proposal is consistent with the objectives of the Business Park zone as follows:</p> <ul style="list-style-type: none"> <li>▪ Development of new high-technology business and office premises for CBA;</li> <li>▪ Ancillary supporting facilities such as retail, recreation and community facilities are proposed;</li> <li>▪ Inclusion of CPTED principles in the design of the proposal;</li> <li>▪ Design of spaces to enhance connectivity and inclusion; and</li> <li>▪ Design excellence in all areas of the proposed works.</li> </ul> <p>The proposal is therefore permissible with development consent.</p>
<b>Subclause 12 – Recreation Zone – Public Recreational</b>	
<p>The objectives of the zone are as follows:</p> <ul style="list-style-type: none"> <li>a) to enable land to be used for public open space or recreational purposes,</li> <li>b) to enable development for the enjoyment of the community,</li> <li>c) to ensure the vitality and safety of the community and public domain,</li> <li>d) to enhance and protect the natural environment for recreational purposes,</li> <li>e) to promote landscaped areas with strong visual and aesthetic values to enhance the amenity of the area.</li> </ul>	<p>The proposal is consistent with the objectives of the Public Recreation zone as follows:</p> <ul style="list-style-type: none"> <li>▪ Extensive upgrades are proposed to existing public open space areas;</li> <li>▪ Will enhance the site for the enjoyment of the community;</li> <li>▪ Vegetation will be protected and augmented throughout the ATP site; and</li> <li>▪ Proposed public domain works have been designed to enhance visual and aesthetic values.</li> </ul>
<b>Subclause 21 – Height, floor space ratio and gross floor area restrictions</b>	
<p>(1) The Height of Buildings Map provides maximum building heights of:</p> <ul style="list-style-type: none"> <li>▪ Building 1/Lot 9 – 10 storeys (majority) and 4 storeys (small, western portion of the lot)</li> <li>▪ Building 2/Lot 12 – 9 storeys (majority) and 11</li> </ul>	<ul style="list-style-type: none"> <li>▪ 9 storeys maximum</li> <li>▪ 7 storey maximum</li> </ul>

Provision	Compliance
<p>storeys (small, western portion of the lot)</p> <ul style="list-style-type: none"> <li>Community Building/Lot 8 – 10 storeys</li> </ul> <p>(2A) The Gross Floor Area Map provides maximum allow gross floor areas of:</p> <ul style="list-style-type: none"> <li>Building 1/Lot 9 – 44,000m<sup>2</sup></li> <li>Building 2/Lot 12 – 42,000m<sup>2</sup></li> <li>Community Building/Lot 8 – 16,450m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>4 storey maximum</li> </ul> <p>On the basis that Building 1 exceeds in part the 4 storey height limit applying to the site, a SEPP 1 objection has been prepared and is included at <b>Appendix D</b>.</p> <ul style="list-style-type: none"> <li>Building 1 - 46,832m<sup>2</sup></li> <li>Building 2 - 56,688m<sup>2</sup></li> <li>Community Building - 3,911m<sup>2</sup></li> </ul> <p>On the basis that the proposed development results in a minor cumulative variation to the GFA development standard, a SEPP 1 objection has been prepared and is submitted at <b>Appendix D</b>.</p>
<b>Subclause 22 – Design excellence</b>	
<p>(2) In considering whether proposed development exhibits design excellence, the consent authority must have regard to the following matters:</p> <ol style="list-style-type: none"> <li>whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,</li> <li>whether the form and external appearance of the building will improve the quality and amenity of the public domain,</li> <li>whether the building meets sustainable design principles in terms of sunlight, natural ventilation, wind, reflectivity, visual and acoustic privacy, safety and security and resource, energy and water efficiency,</li> </ol>	<p>FJMT, Sissons Architects, and Aspect Studios have collaborated to produce a cohesive design for the ATP. All firms are well respected and have a history of achieving design excellence, as detailed within the Architectural and Landscape Design Reports at <b>Appendix B</b> and <b>Appendix C</b>.</p> <p>A specific design competition is not required in relation to the proposal as the development is less than 12 storeys in height.</p> <p>Refer to Section 5.5.1 for further discussion.</p>
<b>Subclause 23 – Car parks</b>	
<p>Development consent may not be granted for the purpose of car parks on land within the Business Zone—Business Park unless the consent authority is satisfied that the number of car parking spaces in that zone will not, as a result of the granting of consent, exceed 1,600 car spaces.</p>	<p>The completed development will provide a total of 1,574 car spaces within land zoned Business Zone – Business Park. The proposal is therefore consistent with this provision.</p>
<b>Subclause 26 – Notification of advertised development</b>	
<p>Subject to the Act and the regulations, notice of a development application for consent to carry out development on land within the Redfern–Waterloo Authority Sites is to be given in accordance with the provisions of any applicable development control plan.</p>	<p>The SSDA will be placed on public exhibition in accordance with the requirements of the Department of Planning and Environment.</p>
<b>Subclause 27 – Heritage conservation</b>	
<p>Various provisions relation to the conservation of a heritage item.</p>	<p>The proposal conserves fixed and moveable heritage items within the site together with further interpretive art installations throughout ATP.</p>
<b>Subclause 28 – Preservation of trees or vegetation</b>	
<p>Various provisions relating to the preservation of certain trees and vegetation.</p>	<p>The proposal will require the removal of some minor vegetation existing within the ATP which is not subject to any particular controls. Notwithstanding, extensive new plantings are proposed throughout the site to appropriately integrate and enhance the built form proposed.</p>



### 5.4.2 SEPP (Infrastructure) 2007

The broader ATP site is directly adjacent to the Main West Railway corridor extending from Redfern Station at ground level and the site is also in proximity to the Eastern Suburbs Railway line which is located beneath the ground in a tunnel largely skirting the southern boundary of the site, approximately beneath Henderson Road.

Division 15, Clauses 85 and 86 of *State Environmental Planning Policy (Infrastructure) 2007* requires referral of this SSDA to Sydney Trains in relation to the proposed development. Initial discussions on the redevelopment of the ATP site have believed to have taken place through the previous landowner, UGDC and will be ongoing through the assessment process.

Clause 87 is addressed within the Noise & Vibration Assessment, provided at **Appendix H**. It is confirmed that the proposed uses are sufficiently removed from rail operations both in terms of potential noise and vibration impacts and this aspect does not warrant any further quantitative assessment.

With respect to Clause 101, whilst the proposal does have a frontage to a classified road (Henderson Road), the proposal is provided with access from existing internal roadways and the proposal does not unreasonably impact from the efficient operation of Henderson Road (refer **Appendix F**).

The proposed development is also deemed to be 'Traffic Generating' development under Part 3 Clause 104 of the SEPP (Infrastructure) 2007 as it seeks approval for commercial premises greater than 10,000m<sup>2</sup> in area. The application therefore must be referred to Roads and Maritime Services (RMS) for comment.

### 5.4.3 SEPP 1 (Development Standards)

*State Environmental Planning Policy No. 1 – Development Standards* provides flexibility in the application of planning controls operating by virtue of development standards in circumstances where strict compliance with those standards would, in any particular case, be unreasonable or unnecessary or tend to hinder the attainment of the objects specified in section 5 (a) (i) and (ii) of the Act.

To this end, written SEPP No. 1 objections in relation to the gross floor area and building height development standards under the Major Development SEPP are provided at **Appendix D** which details the grounds for the standards being unreasonable and unnecessary in the circumstances of the case.

### 5.4.4 SEPP 64 (Signage)

*State Environmental Planning Policy No 64- Advertising and Signage* (SEPP 64) applies to all signage that under an environmental planning instrument can be displayed with or without development consent and is visible from any public place or public reserve.

As discussed in Section 3.11 and illustrated at **Appendix B**, signage zones (to accommodate Building Identification) are proposed to be included on each new building. It is noted that details of the exact content, materiality, and illumination etc. of signs within these zones will be the subject of approval by the Secretary prior to the issue of the relevant construction certificate.

Under Clause 8 of SEPP 64, a consent authority must not grant consent for any signage application unless the consent authority is satisfied that the proposal is consistent with the objectives of the SEPP and with the assessment criteria which are contained in Schedule 1.

Under clause 9 of SEPP 64, Part 3 does not apply to 'building identification signs' (amongst others). Therefore, as Part 3 of SEPP 64 does not apply to the proposed signage, the requirements to refer the application to RMS, to advertise the development, as well as the size restrictions, etc are not applicable.

**Table 9** below demonstrates the consistency of the proposed signage zones with the assessment criteria contained in Schedule 1 of SEPP 64.

**Table 9** – Compliance with the Schedule 1 Assessment Criteria of SEPP 64

Assessment Criteria	Comments	Compliance
<b>1 Character of the area</b>		
Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?	The proposed development is compatible with the existing and desired character for buildings within the ATP precinct.	✓
Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?	The proposed development is generally consistent with the nature and siting of building signage within ATP, such as the NICA and Media City buildings.	✓
<b>2 Special areas</b>		
Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?	The proposed signage is consistent with the provision of signage within the Sydney CBD and general ATP precinct and will not detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, open space areas or waterways.	✓
<b>3 Views and vistas</b>		
Does the proposal obscure or compromise important views?	The proposed signage is integrated with the proposed buildings and therefore will not result in any obstruction of views, and the location and content of signage will not otherwise compromise important views within the precinct.	✓
Does the proposal dominate the skyline and reduce the quality of vistas?	The proposed signage will sit below the ridgeline of the proposed building and will not dominate the skyline.	✓
Does the proposal respect the viewing rights of other advertisers?	The proposed signage does not impact upon the viewing rights of other advertisers.	✓
<b>4 Streetscape, setting or landscape</b>		
Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?	The scale, proportion and form of the proposed signage is consistent with the setting of the core facilities within the established ATP precinct.	✓
Does the proposal contribute to the visual interest of the streetscape, setting or landscape?	The proposed signage contributes to the visual interest of the ATP site by contributing to the identification and recognition of particular buildings within the precinct.	✓
Does the proposal reduce clutter by rationalising and simplifying existing advertising?	The integrated provision of signage zones during the core facility design period establishes a rationalised signage strategy which is consistent with the architecture of the precinct.	✓
Does the proposal screen unsightliness?	The proposed signage is integrated with the architecture of the proposed buildings and will be applied to building facades.	✓
Does the proposal protrude above buildings, structures or tree canopies in the area or locality?	The proposed signage does not protrude above the upper building line of the core facilities.	✓

Assessment Criteria	Comments	Compliance
Does the proposal require ongoing vegetation management?	The proposed signage will not require ongoing vegetation management.	✓
<b>5 Site and building</b>		
Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?	The proposed signage has been designed to be fully compatible with the proposed buildings and is compatible with the architecture of the core facilities.	✓
Does the proposal respect important features of the site or building, or both?	The proposed signage has been located in the most architecturally appropriate locations to assist in place identification and wayfinding.	✓
Does the proposal show innovation and imagination in its relationship to the site or building, or both?	The proposed signage has been fully integrated with the building architecture.	✓
<b>6 Associated devices and logos with advertisements and advertising structures</b>		
Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?	All illumination of future signage will be fully integrated with the building structure	✓
<b>7 Illumination</b>		
Would illumination result in unacceptable glare? Would illumination affect safety for pedestrians, vehicles or aircraft?	Illumination of signage will not result in unacceptable glare, and the location of the proposed signage which is generally below the height of nearby road viaducts	✓
Would illumination detract from the amenity of any residence or other form of accommodation?	The location and orientation of signage is such that it will not impact on nearby residential receivers	✓
Can the intensity of the illumination be adjusted, if necessary? Is the illumination subject to a curfew?	It is not considered necessary or appropriate to impose a curfew on the illumination of signage given it is proposed to be located within a business and technology park. Illumination of signage, including and any dimming measures, will be incorporated in the detailed design of precinct signage.	✓
<b>8 Safety</b>		
Would the proposal reduce safety for any public road?	The proposed signage has been located in order to avoid any impacts on public roads.	✓
Would the proposal reduce safety for pedestrians/cyclists?	The proposed signage will be located above ground level and will not distract from essential sight lines for pedestrian and cyclists.	✓
Would the proposal reduce safety for pedestrians, particularly children, by obscuring sightlines from public areas?	The proposed signage will be integrated with the proposed buildings and will not significantly obscure sight lines from public areas	✓

### 5.4.5 Redfern-Waterloo Built Environment Plan (Stage 1) 2006

The statutory controls contained within the Major Development SEPP for ATP were based on the Redfern-Waterloo Built Environment Plan (Stage 1) 2006. The BEP, which was informed through an urban design analysis and developed with stakeholder and community input, formed one component of the 'Redfern-Waterloo Plan'<sup>1</sup>.

<sup>1</sup> The Redfern-Waterloo Plan, as required under the then Redfern-Waterloo Act 2004, established the overall framework for the revitalisation of the operational area through urban renewal, job

The proposal is considered to be consistent with the land use and design concepts identified within the BEP 1 for ATP in that it will:

- Promote world class technology and business uses, consistent with the land use zoning;
- Provides complimentary land uses to support the core commercial uses with ATP;
- Significantly increases the employment capacity of the site, capitalising on its proximity to public transport;
- Provides a building form which is vastly consistent with the envisaged building envelopes; and
- Reinforces identified entry points, recreational spaces and pedestrian and bicycle linkages.



**Figure 42** – Extract of the BEP 1 in relation to the desired land uses and building footprints  
 Source: Redfern-Waterloo Authority, 2006

In addition, the proposal reflects the historic character of the railway yards, with the proposed built form appropriately matching the subdivided lot sizes and configuration. The built form has also taken into consideration the maximum height limits (which were made as development standards within the MD SEPP) to offer an appropriate interface to surrounding residential areas.

Importantly, the proposal reflects the proposal's strong desire to anchor the ATP site as major employment generating centre for the local and metropolitan workforce. This has been achieved through securing the vast majority of floorspace for innovative and technology based purposes by CBA, one of Australia's largest technology employers.

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*creation, improvements to the physical environment and improvements to the provision of human services.*

## 5.5 Built Form and Design Quality

### 5.5.1 Design Excellence

Design excellence is a key objective for the overall ATP site and a mix of techniques and carefully considered processes have been adopted to ensure that this objective will be achieved.

Each of the architectural/design firms engaged by Mirvac Projects – FJMT, Sissons, and Aspect Studios possess the qualities and experience to prepare an appropriate design solution to, amongst other things, achieve ‘design excellence’ in accordance with the intent of the requirements of the Major Development SEPP for ATP.

In determining its architectural project team, Mirvac Projects was mindful of the special nature of the site and the importance of selecting firms with a demonstrated ability to achieve design excellence given the site’s importance to Sydney.

FJMT, Sissons and Aspects Studios have worked in collaboration to achieve Mirvac’s overarching vision to create workplace buildings sitting within a series of public spaces including tree lined streets, landscaped green spaces and a major central civic space. This urban approach will create an active village and engaging public domain offering workers and the wider community diverse and unique opportunities for recreational and work activities.

More specifically, the Minister may be satisfied that the proposal exhibits design excellence and fulfil the requirements of the Major Development SEPP due to (amongst others):

- An overall building design which offer exemplary design and high quality building materials;
- The height of buildings generally complying with planning controls, ensuring that the new buildings appropriately respond to their context;
- The incorporation of varying and unique designs to the public faces of all buildings, responding to the different immediate contexts of each building;
- The adoption of design components that respond to the surrounding built character by drawing on textural and form references;
- An external design which will complement the proposed upgrades and enhancements to the surrounding public domain areas;
- Delivering highly sustainable buildings and a public realm that:
  - achieves Australian Excellence (5 Star Green Star) or World Leadership (6 Star Green Star);
  - incorporates natural ventilation (Community Building);
  - incorporates a comprehensive WSUD system;
  - provide for renewable energy (PV panels across roof areas);
  - support rainwater harvesting and reuse;
  - ensure rogue reflections causing glare are limited and acceptable;
  - maximise sunlight access to key open space areas;
  - provide for wind conditions similar to existing conditions; and
  - support greater activation across the site (improving safety and security).





**Figure 43** – Photomontage of Building 1 as seen from the intersection of Davy Road and Central Avenue

*Source: FJMT + Sissons*



**Figure 44** – Photomontage of Building 2 (left) and the Community Building (right) as viewed from Davy Road

*Source: FJMT + Sissons*

### 5.5.2 Built form character of ATP

The ATP site was most previously occupied for government railway yards and workshops. Three of the four most significant buildings of the Eveleigh Locomotive Workshops have been retained within the ATP site, namely the locomotive workshops, the new locomotive shop and the works manager's office. These buildings remain physically unaltered by the proposal. In addition, remaining heritage machinery and railway-based objects located throughout the site also remain, with public domain works to take place within the surrounding areas.

In formulating the proposal, specific guidance has been taken from the design principles of the BEP 1 for ATP. These are detailed within Section 5.4.5 and in short, require redevelopments within ATP to consider the heritage charter of the locality whilst accommodating modern predominately business premises. This has successfully been achieved by FJMT + Sissons in the submitted design.

Building 1 has borrowed design elements from the recently completed Darling Quarter development, which has been considered a success by Commonwealth Bank. These elements include a curved primary façade which includes a strong glazed presence along Henderson Road, together with coloured cladding panels and aluminium battens forming an entry statement along Davy Road.

The historical character and materiality of the Locomotive Workshops has informed the design of the northern workplace building, known as Building 2. The proposed building's form and materiality create specific relationships with the existing heritage buildings. In particular, Building 2 has borrowed elements from the adjacent Locomotive Building and Innovation Building. One example is the visible sawtooth and repetitive pitched roof forms which have been given a modern representation as depicted within **Figure 45**. The modern and attractive roof structure in Building 2 also provides a useful means of accommodating HVAC equipment together with allowing recesses for natural light penetration throughout the building.



**Figure 45** – Left, existing roof form of the Locomotive Workshops. Right, proposed Building2  
Source: JBA & FJMT

Other design attributes such as masonry panelling and rustic iron materials are also respectful of the Locomotive Workshops. These attributes ensure a cohesive built form character surrounding Locomotive Street with sufficient building separation provided as per the BEP derived building allotments.

The Community Building has embodied a character which offers an inviting an open feel to the intersection of Davy Road and Central Avenue. This has been achieved by a partly cantilevered building form above the proposed retail plaza. Strong horizontal lines are incorporated into the design through fixed louvres. These louvres are finished in brushed aluminium which differs to the treatments when compared to the facades of Buildings 1 and 2. This ensures the CBA buildings are readily identifiable through common design languages and that the community building stands out in terms of presentation and form, whilst being recessive in scale.

In addition, all three proposed buildings are lower in height when compared to the existing Media City / Channel 7 building within the north-western section of ATP. However, Buildings 1 and 2 are wider and generally exhibit greater bulk when compared to the existing Media City / Channel 7 building and other buildings within ATP such as the Biomedical and NICTA buildings. However, this is largely in accordance with the maximum height limits imposed by the BEP as originally envisaged through consultation with stakeholders and through assessment of existing building form within the Redfern-Waterloo area.

### 5.5.3 Height, Bulk and Scale

The overall vision for ATP as a true technology and innovation hub, meeting CBA's brief requirements for delivering floorspace to support 10,000 jobs, and the planning controls informing development across the ATP all work together to strongly influence the built form outcome.

The workplace model of CBA in particular dictated that the floor space to accommodate the 10,000 workers would be required to be limited to just two buildings (Building 1 and Building 2). This therefore provided an exciting and very different (vastly improved) built form outcome for the third development site (being the community building).

**Table 10** below provides an overview of the proposed building heights against the Major Development SEPP controls. As evident, there has been a balanced approach to building form and height across the site, with sites having compliant/much lower building height than the controls, whilst one site (Building 1 - in part) exceeding the maximum building height under the MD SEPP.

**Table 10** – Height Analysis

Site	MD SEPP Maximum Height (storeys)	Proposed Height (storeys)	Difference
Building 1	10	9	-1 storey
	4	Part 0 / Part 9	Part - 4 storeys / + 5 storeys
Building 2	11	7	- 4 storeys
	9	7	- 2 storeys
Community Building	10	4	- 6 storeys
Total	44	36	-12 storeys

A SEPP 1 objection to this building height development standard in relation to Building 1 has accordingly been prepared and is included at **Appendix D**.

Overall, given that one of the overarching aims of the Major Development SEPP is to facilitate the redevelopment of sites of economic significance to the state so as to facilitate their orderly use/development for the benefit of the State, the strict enforcement of the building height development standards would defeat the overarching purpose of this planning control, as justified within **Appendix D**.

#### Visual and View Analysis

With regards to the visual impacts of the proposal, 3D modelling has been undertaken by FJMT + Sissons Architects (provided with **Appendix B**) to formulate the existing built environment and key sight lines to and from the ATP precinct. The model also includes comparative images of the same view lines which include the proposed buildings.

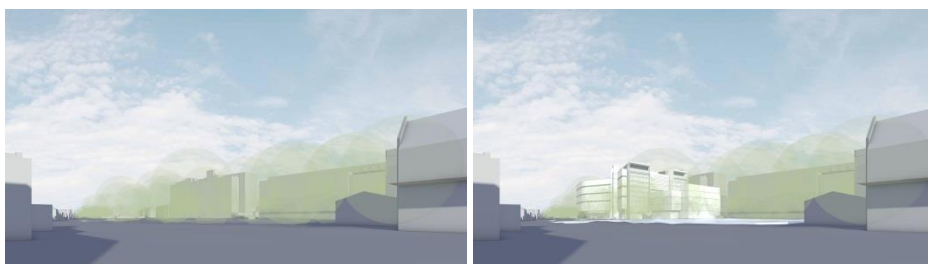
FJMT + Sissons have provided a camera location mark-up plan, which indicates the positioning of the modelling and the direction of the particular view. Camera angles from within ATP itself are marked in blue (indicated as A and B) whereas camera angles from external areas looking into ATP are marked in red (indicated as 1 to 10). Provided at **Figure 46** is the camera location mark-up plan.



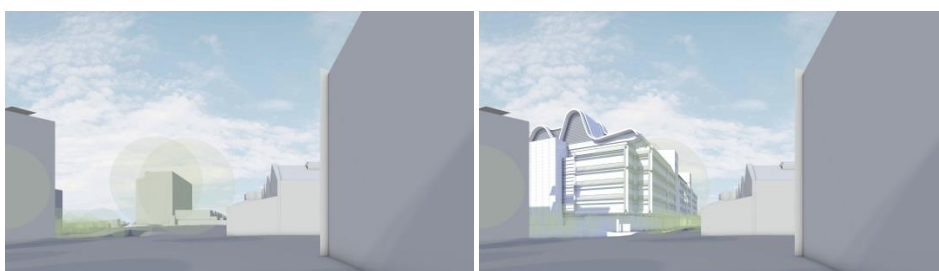


**Figure 46** – Location of view analysis camera points (existing versus proposed)  
 Source: FJMT + Sissons Architects

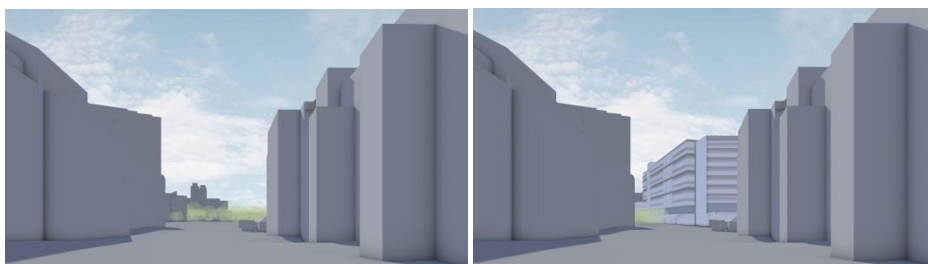
Provided as follows are a selection of viewpoints from the site's nearest adjoining residential neighbours, at Rowley Street, Henderson Road and Cornwallis Street, respectively at **Figures 47 to 49**.



**Figure 47** – Camera angle 2, looking north-west into ATP from Henderson Road  
 Source: FJMT + Sissons Architects



**Figure 48** – Camera angle 4, looking west into ATP from Cornwallis Street  
 Source: FJMT + Sissons Architects



**Figure 49** – Camera angle 7, looking east into ATP from Rowley Street  
 Source: FJMT + Sissons Architects

As can be demonstrated within the above images, the proposed buildings do not significantly impede any iconic views or outlooks within the locality. The proposal represents a reasonable redevelopment of lots which have long been earmarked for commercial buildings and communicated to the general public and surrounding neighbours as part of BEP 1.

In general, it can be seen that the proposed buildings have been scaled to fit the development sites appropriately with no adverse overbearing impacts on the surrounding properties or on the public domain areas.

Whilst it is acknowledged that an overall variation to building density is sought (approximately 4.8% increase in GFA) along with a variation to building height (in part), from the vantage points surrounding ATP these variations are unlikely to be perceptible to the casual observer.

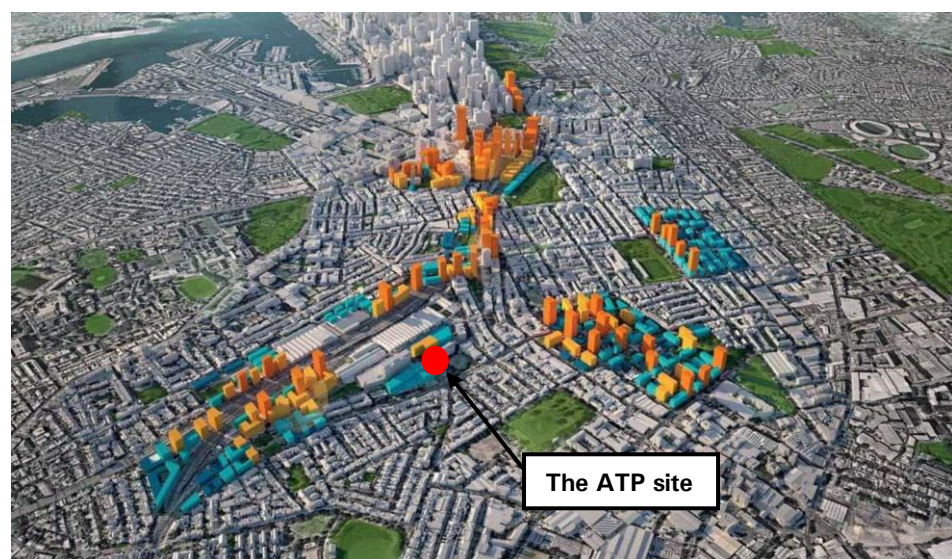
It may also be considered that the addition of the proposed built form within ATP improves visual outcomes for the surrounding locality as the proposed buildings exhibit design excellence and are located within high-quality public domain areas which are proposed to be further embellished by a variety of means including significant tree plantings.

Overall, it can be concluded that the proposed buildings have been appropriately integrated into the existing built form of the ATP site with no significant or unreasonable impacts on existing view corridors or on the general outlook of surrounding properties.

### Central to Eveleigh

The Central to Eveleigh Corridor is a key strategic urban renewal program in Sydney. The regeneration of this corridor is essential in maximising use of land and infrastructure within Sydney's CBD fringe.

The corridor is presently under investigation by UGDC and has been underpinned by the announcement of the new Waterloo Metro Station in December 2015. As a result UGDC envisages increased height and density to support this new station and to provide a basis for significant increases to housing and employment. Delivery of ATP for new jobs is pivotal in the UGDC's strategic vision and the proposal is entirely consistent with this and with the preliminary built form concept, which has been prepared along the corridor (Figure 50).



**Figure 50** – Proposed Central to Eveleigh Corridor Transformation Project  
Source: UGDC



### 5.5.4 Overshadowing

With regards to overshadowing impacts of the proposal, shadow diagrams (plan and elevation) have been provided by FJMT + Sissons Architects on June 21 (solstice) and March 21 (equinox) at hourly intervals from 9.00am to 3.00pm. In addition, detailed analysis has been undertaken with 3D modelling with aerial photography input for the southern side of Henderson Road. These diagrams and analysis is provided as part of the Architectural Design Report at **Appendix B**.

This study reveals that the vast majority of shadows cast from the proposal falls within the ATP site including public domain areas and on internal non-residential buildings such as the Biomedical Building (to the south of Central Avenue), the Transport Management Centre and NICTA building (both to the west of Garden Street).

However, external to the ATP precinct several properties along the southern side of Henderson Road are affected by additional overshadowing which is a result of the proposal (Building 1). In general terms, properties within this group are generally semi-detached terrace housing with an interspersing of some commercial uses. Typical height of these properties is 1 and 2 storeys.

Generally, the greatest impact on these properties is experienced in the early morning period and late afternoon period as a result of the shape of the Building 1 development site to Henderson Road. These properties are largely shadow affected on their street facing, northern elevation (**Figure 51**).



**Figure 51** – Shadows cast by the proposal in mid-winter at 12pm, plan (top) elevation (bottom)  
Source: FJMT + Sissons Architects

The above figures provides plan and elevational shadow diagrams (at midday at mid-winter) in relation to Building 1, with:

- Light blue - representing the maximum shadows cast from a complaint building envelope;
- Deep purple – representing the shadows cast from the complaint built form of Building 1; and
- Light red – representing the additional shadows cast from the proposed height variation.

It is noted that the majority of the properties located on the southern side of Henderson Road are already shaded to some degree by existing mature street trees along Henderson Road and within the frontages of these properties. Further disruption to sun access in mid-winter for these properties is also present from mature canopy trees located within ATP itself on the northern side of Henderson Road.

Importantly, the proposal does not impact on the outdoor play area of the existing Alexandra Child Care Centre to the west of the ATP site. However, the Child Care Centre however, is impacted by shadows cast by the existing Media City building, located within the western portion of ATP. No shadowing was experienced within the study period on residential buildings located on the eastern side of Garden Street.

On the whole, the overshadowing impact of the proposal on surrounding properties external to the ATP site is considered reasonable in the circumstances and in line with expectations to deliver Sydney a world class innovation and technology focused hub. The proposal has a balanced shadow impact when compared to the allowable building envelopes on the site. Shadow impacts are neither significant nor unreasonable in the circumstances.

Further overshadowing impact analysis is undertaken within **Appendix D**.

### 5.5.5 Materials and Finishes

A Schedule of Materials has been prepared by FJMT + Sissons and is included in the Architectural Design Report provided at **Appendix B**. Full details and representative images are provided at this Appendix.

As Buildings 1 and 2 are to be both largely occupied by CBA, these buildings generally share consistent materials and finishes. These include:

- Glazed curtain walls;
- Profiled metal spandrel panels;
- Through coloured solid cladding panels;
- Aluminium battens and louvres; and
- Metal screening.

In contrast the Community Building has a more simple choice of materials to match its recessive presentation. These include:

- Aluminium framed glazing;
- Expressed structural frames; and
- Aluminium batten screens.

## 5.6 GFA Distribution and Land Use Mix

### GFA Distribution

The proposed development includes two of three buildings which will exceed the GFA allocation identified under the MD SEPP. In addition, the total combined GFA for the three sites will also result in a minor exceedance of the total allowable under the MD SEPP.

The premise for this exceedance is the desire of CBA to move to a consolidated campus with a limited number of buildings, to maximise the amount of collaborative workspace for its staff. The two larger format buildings proposed ensure an optimal floorspace layout to meet the needs of CBA.

Notwithstanding these variations, this has resulted in an opportunity to provide a lower scale mixed-use building with a focus on providing community floorspace and other facilities to meet the day-to-day needs of the community.

The resultant GFA distribution is provided below at **Table 11** and further discussion and justification of this floorspace variation provided at **Appendix D** (formal SEPP 1 Objection).

**Table 11** – GFA distribution and analysis

Site	MD SEPP Maximum GFA(m <sup>2</sup> )	Proposed GFA (m <sup>2</sup> )	Difference	Percentage change
Building 1	44,000	46,832	+ 2,832	+ 6.4%
Building 2	42,000	56,688	+ 14,688	+ 35%
Community Building	16,450	3,911	-12,539	- 76.2%
<b>Total</b>	<b>102,450</b>	<b>107,430</b>	<b>+ 4,980</b>	<b>+ 4.86%</b>

### Land Use Mix

With respect to land use mix, the proposal is entirely consistent with the envisaged character for the ATP precinct. The BEP 1 envisages the ATP site a key business park with a focus on commercial development with appropriate supporting facilities and a preference for excluding residential development.

This SSDA delivers a complementary combination of land uses which include:

- Commercial Office;
- Retail;
- Supermarket;
- Child Care;
- Gym;
- Community; and
- Recreation and Public Domain.

The proposed land use mix will ensure that ATP remains as a prominent and activated business park, which also provides appropriate non-office related floorspace for the support of workers and the surrounding community.

Illustrated at **Figure 52** is a composite diagram indicating the active uses at street level. Provided in yellow are the proposed retail tenancies, blue is the office foyers, red is the childcare and green is the gym. The proposal activates a large portion of the internal roads and high-intensity public thoroughfares within ATP, contributing to and complimenting the high-quality public domain upgrades proposed.



**Figure 52 – Streetscape activation plan**  
Source: FJMT + Sissons

## 5.7 Public Domain and Urban Design

The design of the public domain is based on the following principles:

### Connection

- Provide clear connections for vehicular traffic, pedestrians and cyclists that are integrated with and responsive to the surrounding environment;
- Enhance the existing circulation routes to ATP, including to surrounding transport nodes, such as the pedestrian routes to and from Redfern Station;
- Design the public domain to be in line with the Central to Eveleigh UTP;

### Activation

- Create public spaces which are attractive, comfortable and usable;
- Integrate social infrastructure including a responsive suite of public realm furniture, lighting and other amenities;
- Design a public realm for activation day through to night, seven days a week;

### Diversity

- Create a variety of spaces and places to encourage flexibility of use;
- Provide a range of spaces from small and intimate to open and spacious to cater for gatherings and overlays of festivals and events;

### Identity

- Reveal and interpret the former known forms, patterns and use of the site to create a strong sense of place, and to educate and enhance the everyday experience;
- Identify opportunities for integrated heritage interpretation and site specific public art and to potentially integrate existing heritage artefacts within the precinct into the public domain design;



- Retain and reinforce existing site character through preservation of materiality and existing high quality paving ground treatments, heritage infrastructure and existing mature tree stock;

#### Sustainability

- Propose high quality, low maintenance, low energy usage and robust materials;
- Use native flora and encourage habitats for fauna;
- Support the sustainability of the existing residential community in surrounding suburbs by incorporating social infrastructure;

#### Safety

- Create safe, low-speed publicly accessible spaces; and
- Design the public realm with regard to crime prevention (CPTED) principles.

The resultant design has met these design principles and is considered to successfully accommodate the proposal whilst balancing the environmental needs of the site and ensuring amenity for occupants of surrounding land uses.



**Figure 53** – Photomontage of the proposed Building 2 from Locomotive Street  
Source: FJMT + Sissons

## 5.8 Transport, Traffic and Access

A Transport Impact Assessment has been prepared by GTA Consultants (**Appendix F**). This assessment determines the potential for impacts of the proposed development on the existing transport network. The key components of the assessment are outlined below.

### 5.8.1 Operational Phase

#### Car Parking

A total of 121 additional car spaces are proposed in this SSDA, bringing the total ATP provisions from 1,453 car spaces to 1,574 car spaces. This includes an additional 42 on-street, time limited spaces. The proposal remains below the



threshold set for car parking within the ATP site of a total of 1,600 car spaces, as applied within SEPP (Major Development) 2005.

The proposed car parking areas and associated elements are proposed to be designed in accordance with the relevant Australian Standard for car parking facilities.

### Bicycle Parking

Secure storage for 606 bicycle spaces is provided within the lower levels of Buildings 1, 2 and the Community Building, together with End-of-Trip facilities for use by workers including 64 showers. Numerous bicycle racks for use by the general public and visitors to the ATP site are provided in the public domain.

### Pedestrian & Cycle Network

Existing pedestrian and cycle connections will largely be retained throughout the ATP site and will be embellished through upgrades to surface materials, wayfinding and lighting.

### Servicing

Separate loading areas would be provided for Building 1 and Building 2. The loading dock access for both buildings is located on Central Avenue, east of the respective car park driveways.

The proposed loading docks within their respective building have been designed to accommodate vehicles up to an Australian Standard 8.8m long medium rigid vehicles (MRV). Each dock loading would have two MRV bays plus three small rigid vehicles (SRV) bays for small trucks, vans and utility type vehicles. The design allows vehicles to enter and exit the loading dock in a forward direction.

## 5.8.2 Traffic Impact Assessment

### Existing Traffic Conditions

The overall ATP site can be accessed from the following roads/intersections:

- Davy Road off Henderson Road;
- Central Avenue off Garden Street; and
- Locomotive Street off Garden Street.

From the traffic surveys conducted in October 2015 at the above access intersections, GTA Consultants estimate that the ATP site generates approximately 586 vph during the morning peak hour, and 415 vph during the evening peak hour.

### Trip Generation

The existing ATP site is served by approximately 1,072 car parking spaces. However, based on observations and car park occupancy surveys by GTA Consultants, the car park was approximately 67 per cent occupied during the morning peak period, and approximately 62 per cent occupied during the evening peak period. On this basis, the existing site traffic generation rates equate to:

- Morning peak period – a trip generation rate of 0.81 trips per car parking space occupied, and
- Evening peak period – a trip generation rate of 0.62 trips per car parking space occupied.

As a conservative approach, it is assumed that in the future case, the additional car parking provision would be 100 per cent fully utilised. Using the above trip rates, the proposed additional 415 parking spaces would generate:

- Morning peak period – 336 trips per peak hour in addition to the existing traffic generation; and
- Evening peak period – 257 trips per peak hour in addition to the existing traffic generation.

### Road Layout and Traffic Assessment

In conjunction with the proposal, Mirvac proposes to convert the kerbside lanes on both sides of Davy Road to provide on-street parking spaces. This would effectively reduce the number of arrival lanes from three to two, and the number of departure lanes from two to one.

At present, Davy Road has a two-way peak hour flows of 263 vph. In the future, following the completion of the proposed development the peak hour two-way flows on Davy Road would increase to 533 vph. Intersection analysis was conducted to assess the traffic effects of the proposed change. The analysis indicates that the proposed changes to Davy Road would have no impact to the intersection capacity at the Henderson Road intersection. It would operate with the same level of service with the same traffic delays as that found under the existing intersection layout (with future development flows).

As a sensitivity test, future intersection volumes to and from Davy Road at the Henderson Road intersection was increased by 50 per cent. The sensitivity test indicates the intersection would continue to operate with acceptable level of service.

Further, from the analysis undertaken by GTA Consultants, it can be seen that under post development traffic condition, the additional traffic generation would generally have minimal impact upon the surrounding intersections with negligible changes to delay and level of service. As a result development would not create any material adverse impacts to the surrounding intersections or any traffic capacity impacts.

### Pedestrian Analysis

ARUP have undertaken a precinct wide pedestrian analysis for ATP (refer to **Appendix Z**). In summary, Arup conclude that as a result of the proposed development:

- The key desire line into the site is from Redfern Station, with approximately 4,100 people arriving the AM peak hour;
- With the exception of Locomotive Street, the pedestrian links operate at LOS A during the AM peak under the Building 1, 2 and 3 demand. Locomotive Street operates at LOS B at its narrowest section, and at LOS A for the majority of its length, which is considered acceptable;
- The stepped path from Redfern Station will operate at LOS B during the AM peak, which is acceptable;
- Pedestrian priority should be maintained at the two intersections with Mitchell Way, via a zebra crossing; and
- Site circulation and accessibility is satisfactory.

### 5.8.3 Construction Traffic Impact and Management

Mirvac has provided details of construction related traffic management within the CEMP (**Appendix W**), which are as follows:

- During early works and site excavation, construction related traffic will enter the site off Henderson Road via Davy Road;
- It is proposed to construct a temporary construction traffic egress roadway to the West of Building 1. This will allow construction traffic from Building 1 to exit onto Henderson Road without interacting with Building 2 construction traffic and therefore reducing the likelihood of congestion / interfacing issues on Central Avenue;
- The majority of Building 2 and Site Compound construction traffic will exit via Central Avenue onto Garden Street; and
- Construction traffic for the Community Centre Building will enter Central Avenue via Garden Street, turn left onto Davy Road and exit Davy Road onto Henderson Road.

By implementing these one way traffic systems the impact on existing tenants will be significantly reduced. Mirvac have provided discussion on conceptual construction traffic management procedures based on the envisaged stages of construction. Further details regarding construction traffic management will be provided prior to the issue of the relevant Construction Certificate.

Importantly, all site workers and visitors to site shall be actively encouraged to take public transport to and from the site.

#### Mitigation Measures

The following mitigation measures have been recommended by Mirvac:

- Exit points on each site will be manned by qualified Traffic Controllers who will be responsible for managing both vehicular and pedestrian traffic movements;
- A Mirvac Site Specific Workplace Risk Management Plan (WRMP), will be implemented prior to the commencement of construction and be updated from time to time to reflect the current stage of site works;
- Signage will be established at the precinct entry and exit points to alert pedestrians and other drivers to the movement of construction traffic. Visitors to the sites will be escorted at all times by Mirvac Site Staff and will be provided with a defined entry path from the point of entry;
- Temporary road closures, single lane access and relocations during the construction period will be subject to coordination with the appropriate authorities; and
- All traffic related issues and changes shall also be presented to Stakeholders as part of the consultation process. These will, wherever and whenever possible, be carried out in non-peak periods.

It is noted that a detailed traffic and pedestrian traffic management plan will be prepared and provided prior to the issue of the relevant Construction Certificate.

## 5.9 Aboriginal and European Heritage

A combined Heritage Impact Statement, Archaeological Impact Statement and Heritage Interpretation Strategy has been prepared by Curio Projects and is provided at **Appendix G**.

### European

As previously indicated, the broader ATP site has various fixed and movable items of heritage significance. Key conclusions drawn from the report on heritage related impacts of the proposed development are as follows:

- The proposal responds positively, in terms of the orientation of the intended built form and circulation. The development conforms with the historical patterns of development on site and meets with the heritage objectives of the masterplan;
- The proposed works contain carefully considered key design features that will create positive heritage outcomes, in terms of providing a much improved, informative and creative interpretation of the significant former uses of the site within public domain spaces, compared to that which currently exists;
- Whilst the need to demolish the foundry walls is considered to have a negative heritage impact, as it will result in the loss of the remnant foundry walls, their removal is allowable within the constraints of the endorsed CMP; and
- It is considered that the treatment of the external movable heritage items, within the landscaping of the site, and its public areas, and its proposed incorporation into the public artworks within the site is an extremely positive impact within the development, as a whole.

### Mitigation Measures

A Heritage Interpretation Strategy for the ATP site is presently being prepared in accordance with the NSW Heritage Manual and the OEH's Heritage Interpretation Policy.

### Archaeology

Curio Projects confirm that no Aboriginal sites are recorded in or near the site and no Aboriginal places have been declared in or near the site by means of an Office of Environment and Heritage AHIMS search. The proposed works are unlikely to have any impact on Aboriginal objects or sites.

### Mitigation Measures

Should an unexpected archaeological resource be found, then works would cease in the immediate area and archaeological advice sought. Depending on the nature of the find and its confirmation as an Aboriginal object, then the relevant regulatory authorities would be contacted for further advice.

## 5.10 Accessibility

Morris Goding Accessibility Consulting has undertaken an assessment of the proposal against the relevant provisions of the Building Code of Australia (BCA), Australian Standards (AS), Disability Discrimination Act (DDA) and other relevant legislation in regards to accessibility.

The Access Report (refer to **Appendix R**) details the findings of the assessment and concludes that in general, the proposed development has accessible paths of travel that are continuous throughout, and in line with the report's recommendations demonstrates an appropriate degree of accessibility.

The drawings indicate that compliance with statutory requirements pertaining to site access, common area access, accessible parking and accessible sanitary facilities can readily be achieved.

### Mitigation Measures

In order to ensure equal access is provided throughout the proposed development, the detailed design of the proposal will need to ensure compliance with the relevant accessibility provisions of the BCA 2015 and other applicable legislation.

## 5.11 Noise and Vibration

A Noise and Vibration Assessment has been undertaken by Renzo Tonin and Associates (refer to **Appendix H**). This Assessment has identified and investigated the following potential acoustic and vibration impacts (over page):

- Construction noise and vibration;
- Road traffic noise from the proposal; and
- Operational noise from the proposal.

The existing acoustic environment has been determined using a combination of long-term and short-term noise monitoring. Based on the background and ambient noise monitoring carried out at the nearest affected residential locations and sensitive receptors, Renzo Tonin and Associates have developed a set of project specific noise criteria.

### 5.11.1 Construction Noise and Vibration

Renzo Tonin have examined the expected construction methodology and equipment to be utilised during the construction of the proposal. A detailed assessment of the construction noise and vibration is provided at **Appendix H**, whilst an overview is provided below.

#### Construction Noise & Vibration

On the basis of these findings, there is potential for the 'noise affected' targets to be exceeded at the nearest residential premises, the child care centre and TOP education facility. Noise is however predicted to be below the 'highly affected' target at residential receivers. Consideration will therefore need to be given to all reasonable and feasible mitigation and management measures subject to the issuance of a Construction Certificate for the proposal works.

With regard to the Channel 7 studios located at 8 Central Ave, the noise intrusion from airborne noise is expected to be sufficiently reduced so as not to affect the use. However, on-site testing should be carried out to confirm outcomes due to the sensitivity of the use. It is expected that structure borne noise generated by any vibration intensive works would be most critical with regard to impacts upon the studios and all endeavours should be made to reduce vibration intensive work in proximity to the studios, or in contact with the carpark structure below the plaza area.

Renzo Tonin and Associates recommend site specific buffer distances to vibration significant plant (such as bobcat, jackhammer, excavator, loaded truck movements etc) are determined and implemented prior to the commencement of the regular use of the plant equipment.



## Mitigation Measures

- At the commencement of operation for each plant or activity on site, which has the potential to generate significant vibration levels, attended vibration monitoring should be undertaken so to refine the recommended minimum working distances;
- Where vibration is found to be excessive, management measures shall be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller rock breakers, using alternative processes or establishment of larger minimum working distances;
- Carry out additional vibration monitoring when construction activities are at the nearest point to the nearby sensitive structures. This monitoring may signal to the contractor by way of a buzzer or flashing light, when levels approach/exceed the recommended limits;
- Before, during and after the demolition and construction stages we recommend preparation of a dilapidation report on the state of the existing buildings sharing the property boundary with the site; and
- It is further recommended that a vibration complaints management system be established prior to the commencement of these works.

### 5.11.2 Operational Noise

The operational noise sources associated with the development include the child care centres, gym, café/retail tenancies and mechanical plant/equipment.

For the child care centre, a worst case assessment has been carried out assuming all 90 children from each centre are in the outdoor play area. For this scenario, the following noise mitigation measures have been included in the assessment:

- Building 1 - 1.8m high solid barrier around the perimeter of the outdoor play area
- Community - 1.5m high solid barrier around the southern perimeter of the outdoor play area

For the retail uses, the following is assumed:

- Building 1 - approximately 40 seats externally along the northern and eastern frontages combined. Internal noise will be readily mitigated by the façade.
- Building 2 - approximately 50 seats each for the retail areas and 200 people in the plaza area on the western side. Internal noise will be readily mitigated by the façade.
- Community building - approximately 35 seats externally in the northern plaza area and 25 seats to the southern end. Internal noise will be readily mitigated by the façade.

The predicted noise levels indicate that compliance can be achieved with the external project noise goal of 51 dB(A), while also providing allowance for additional noise from mechanical services plant and equipment. It is further noted that the gymnasium in the Community building and supermarket located in Building 2 could operate 24 hrs subject to specific design recommendations and management techniques.

## Road Traffic Noise

Road Traffic Noise arising from traffic generated by the proposal was assessed based on average peak traffic generations by GTA consultants and existing road traffic noise levels. Whilst it is noted road traffic noise levels along Henderson Road and Garden Street exceed the base criteria set out by the NSW Road Noise Policy, the proposal increased this exceedance in peak times between 0.2 and 0.9db, which is considered to be minor and reasonable in the circumstances of the development.

In addition to the peak hour assessment, consideration was also given to potential impacts from the proposed 24hr supermarket, to be located within Building 2. It is however expected that the approximate 500m<sup>2</sup> supermarket would generate negligible traffic outside of the daytime period particularly as no specific parking provision is provided for the retail use. The supermarket is expected to generate the majority of its custom from walk-in pedestrians working and living in the surrounding areas.

Furthermore, based on the location of the proposed supermarket, the limited customers that may access the site by private vehicles are expected to utilise Davy Road, and the additional traffic on Henderson Road would be inconsequential in regard to noise.

Noise assessment in accordance with the NSW Road Noise Policy (RNP) is based on the average traffic generated over the 15-hour day and 9-hour night period, however the traffic studies forecast only peak hour generation from the ATP site. Assessment has conservatively been based on the AM and PM peak hour generations. As the existing road traffic noise levels measured along Henderson Road and Garden Street exceed the base criteria of the RNP, the 2dB(A) allowance is used as the basis of assessment. Results from the peak hour traffic noise assessment reveal the following increases:

- Garden Street, north of Central Avenue: 0.9dB(A) increase;
- Garden Street, south of Central Avenue: 1.0dB(A) increase;
- Henderson Road, between Garden Street and Mitchell Road: 0.4dB(A) increase;
- Henderson Road, between Alexander Street and Mitchell Road: 0.4dB(A) increase; and
- Mitchell Road, south of Henderson Road: 0.2dB(A) increase.

## Mitigation Measures

### Construction:

- At the commencement of operation for each plant or activity on site, which has the potential to generate significant vibration levels, attended vibration monitoring should be undertaken so to refine the recommended minimum working distances;
- Where vibration is found to be excessive, management measures shall be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller rock breakers, using alternative processes or establishment of larger minimum working distances;
- Carry out additional vibration monitoring when construction activities are at the nearest point to the nearby sensitive structures. This monitoring may signal to the contractor by way of a buzzer or flashing light, when levels approach/exceed the recommended limits;

- Before, during and after the demolition and construction stages we recommend preparation of a dilapidation report on the state of the existing buildings sharing the property boundary with the site; and
- It is further recommended that a vibration complaints management system be established prior to the commencement of these works.

#### Operational:

- Childcare: the following noise mitigation measures have been included in the assessment: Building 1 -1.8m high solid barrier around the perimeter of the outdoor play area and Community -1.5m high solid barrier around the southern perimeter of the outdoor play area.
- Retail/Supermarket: a detailed review of the retail uses should be carried out during the design development stage in order to confirm appropriate noise mitigation measures have been incorporated into the development. Additional measures such as acoustically absorptive treatment to soffits or external covered areas and internal spaces may be considered to improve the acoustic amenity of the areas and increase noise mitigation. With regard to the proposed 24hour supermarket, operational noise would be limited to mechanical equipment which would be subject to detailed design.
- Plant:
  - Acoustic assessment of mechanical services equipment should be undertaken during the detail design phase of the development to ensure that the cumulative noise of all equipment does not exceed the applicable noise criteria. Development consent conditions typically require detailed assessment of mechanical plant and equipment prior to construction.
  - Noise control treatment can affect the operation of the mechanical services system. An acoustic engineer should be consulted during the initial design phase of mechanical services system to reduce potential redesign of the mechanical system.
  - Mechanical plant noise emission can be controlled by appropriate mechanical system design and implementation of common engineering methods, which may include procurement of 'quiet' plant, strategic positioning of plant away from sensitive neighbouring premises to maximise intervening acoustic shielding between the plant and sensitive neighbouring premises, commercially available acoustic attenuators for air discharge and air intakes of plant, acoustically lined and lagged ductwork and acoustic barriers between plant, sensitive neighbouring premises and partial or complete acoustic enclosures over plant
- The specification and location of mechanical plant should be confirmed prior to installation on site, and
- Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 '*Rotating and Reciprocating Machinery –Mechanical Vibration*'.

## 5.12 Civil Infrastructure and Utilities

AT&L has examined the location of existing utilities infrastructure in the vicinity of the Site and provided an assessment of the potential impact of the proposal on this existing infrastructure (see **Appendix N**). AT&L have also recommended what extension or augmentation of utilities needs to occur to adequately service the proposed development.

The proposed development is not expected to have any adverse impacts on the existing utilities infrastructure subject to the below mitigation measures being put in place. It is also confirmed that the proposal will be adequately serviced subject to the detailed refinement of utilities extension/augmentation with the relevant utility providers. Refer to Section 3.12 for further details of utility extension / augmentation.

### Mitigation Measures

In light of the location of existing utilities infrastructure over the site and the nature of the proposed development, potential mitigation measures may include the following (to be determined prior to the Construction Certificate process):

- Undertake a desk-top investigation of existing services using Dial Before You Dig information and site observations;
- Undertake a site survey to accurately locate existing infrastructure assets where practical;
- Undertake site exploration works where considered necessary to more accurately locate existing infrastructure assets and test for unknown services;
- Continue consultation with utility providers to confirm location of services and to obtain all necessary consents to work in their vicinity;
- Incorporate utility technical and hazard requirements into the design and construction documentation;
- Ensure safe work methods statements and inspection and test plans are prepared by accredited contractors;
- Implement and record pre-start work checklists;
- Conduct workshops with utility providers where diversion of, connection to or construction close to critical assets is required; and
- Ensure field safety inspectors are present during critical works as determined by each utility provider.

As design progresses or as new information becomes available, the above process will be adjusted or supplemented as required to ensure existing infrastructure assets are adequately protected. Ongoing consultation and design development with the relevant utility providers should continue to be undertaken throughout the process.

## 5.13 Railway Infrastructure

The Eastern Suburbs Railway line is located in proximity to the development zones, generally running beneath Henderson Road and then turning towards the north, generally between Garden Street and Botany Road. Initial risk assessment was undertaken by UGDC before sale to Mirvac.

### Mitigation Measures

Douglas Partners confirm in their Preliminary Geotechnical Report (**Appendix K**) the following mitigation measures for the existing railway structures in close proximity to the site:

- Based on the estimated depth of the tunnel adjacent to Building 1, the line drawn from the base of the existing tunnel is estimated to intercept the ground surface at the southern boundary of the proposed building. Consequently, all footings for the building will need to be founded below the current surface level. Since the building is proposed to be founded on rock, which is estimated to be below RL 6 m AHD, at an approximate depth of 10 m,

the rail requirements do not pose a geotechnical constraint for the foundations of the proposed building. The proposed foundation method of bored piles socketed into rock or CFA piles are viable foundation methods.

- During the demolition and construction phase for Building 1 an approximately 5m wide exclusion zone should be established parallel to the boundary with the rail easement above the tunnel. No large earthmoving machinery or crane should be allowed in this exclusion zone and weight restriction should be in place for material storage.
- A dilapidation survey will need to be completed for the section of the tunnel parallel to Building 1, i.e. from the corner of Davey and Henderson Roads to the south-western corner of Lot 9.
- No bulk excavation is planned for Building 1, therefore in DP's opinion there should be no need to carry out a 3D finite element analysis.
- Should the Vice Chancellors Oval be used for stockpiling excavated filling or other materials, the stockpile should be restricted to the area north of the tunnel. If the portion of the oval over the tunnel is required, the stockpile height will need to be restricted to a maximum of 2 m.

## 5.14 Operational Waste Management

Waste Audit has prepared an Operational Waste Management Plan (WMP) to ensure waste generated by the proposal is appropriately managed (see **Appendix X**). Based on Council's waste generation guidelines, the WMP identifies the potential types and volumes of waste that are expected to be generated in the operational phase of the proposed development, and suggests systems to be implemented to appropriately manage this waste.

Waste Audit has provided a number of recommendations to ensure that the waste is appropriately sorted to ensure maximum capture of recyclables and to minimise general waste. This involves briefing of tenant staff and building caretakers and managers, bin location/availability, signage and appropriately management of bin collection and servicing.

The waste rooms (both interim and within service/collection areas) will be designed to minimise odours, deter vermin and protect surrounding areas. Colour coding and signage will also be used to delineate different areas and aid in the management of waste.

All waste will be collected by a commercial contractor to be engaged once the proposal is operational.

### Mitigation Measures

In order to appropriately manage and mitigate any adverse impacts arising from waste, the different components of the Waste Management Plan should be implemented into the operation of the proposed development.

## 5.15 Water Cycle Management

The Civil, Stormwater and Infrastructure Services Report prepared by T&L (**Appendix N**) and the Ecologically Sustainable Development Report, prepared by ARUP (**Appendix P**) provide a full assessment of the proposed water cycle management methodologies for the site in conjunction with the proposed development. The key sections of these reports are addressed below.



### 5.15.1 Stormwater

All new stormwater drainage for the entire development is proposed to comply with the following:

- City of Sydney A4 Drainage Design Guidelines; and
- City of Sydney – Interim Floodplain Management Policy.

It is proposed to obtain green star credits based on Credit 26 – Stormwater under the Green Building Council of Australia document. To obtain these credits the proposed stormwater drainage design will meet the following criteria:

- Reduced Peak Discharge; and
- Reduced Pollution Targets in line with Column C of Green Star design and As-Built v1.1 credit.

#### Mitigation Measures

It is recommended that the proposed stormwater modifications, amplification and connection works are carried out to ensure stormwater is adequately managed.

### 5.15.2 Water Quality

The proposed development incorporates water sensitive urban design (WSUD) measures to reduce potable water consumption, minimise wastewater generation and treat urban stormwater. The following elements have been included as WSUD measures:

- Bio-swales;
- Rain gardens;
- Rainwater harvesting tanks;
- Proprietary treatment tanks; and
- Gross Pollutant Traps.

Specific details on these measures are discussed **Appendix P**. The final type of these measures selected for the life of the proposal will be determined in the detailed design of the development.

Sediment and erosion controls will also be included during the construction phase of the proposed development. These controls are likely to include:

- Hay bales;
- Silt fences;
- Inlet filters;
- Diversion channels;
- Stabilised site access and truck wash-down areas; and
- Temporary stabilisation of areas outside the Western Plot.

Based on MUSIC modelling undertaken by ARUP, with the inclusion of suitable treatment devices, the proposal will not have any adverse impacts in regards to stormwater runoff. Furthermore, the proposal will achieve the established targets, resulting in an improvement over the current state of stormwater runoff from the site.

## Mitigation Measures

To appropriately manage and mitigate stormwater runoff on the site and achieve the established water quality targets, ARUP have recommended a variety of measures to be incorporated within the detailed design prior to the issue of a construction certificate.

## 5.16 Geotechnical

The soil and geotechnical conditions of the site are summarised in Section 2.2.5 of this EIS, and detailed in Douglas Partner's Preliminary Geotechnical Assessment included as **Appendix K**.

The Geotechnical Assessment determines that the proposal is feasible from a geotechnical perspective, subject to the appropriate additional site investigation, design assessments, and construction monitoring.

A Structural Design Report is provided at **Appendix O**, prepared by Enstruct group. Enstruct group confirm that it has been involved in the structural concept design and preparation of the Development Application documentation for all permanent structural elements for the project. Enstruct group conclude that the building structural design is able to be completed without significant impact on the proposed building envelopes.

## Mitigation Measures

No specific mitigation measures are required as the proposal is considered geotechnical and structurally feasible. Douglas Partners does however provide specific recommendations during the excavation and piling stages of construction to minimise damage to adjacent property and infrastructure. Further Enstruct group detail the design criteria the development will comply with.

## 5.17 Contamination

### Human Health and Ecological Risk

A Human Health and Ecological Risk Assessment has been prepared by JBS&G (**Appendix L**) which presents a specific assessment of potential risks to human health and identified environmental receptors in the context of the proposed development and existing site conditions. JBS&G detail a number of recommendations to ensure the protection of human health of future occupants (noting that the risk assessment for the child care centres will require separate assessment and validation). Further, JBS&G advise that the re-use of fill materials on site is not likely to pose a potential ecological risk consistent – subject to adoption of proposed recommendations.

### Remediation

A Site Specific Remedial Action Plan (RAP) has been prepared by JBS&G. The objectives of the RAP are to:

- Characterise and document the known extent of environmental impact within the site via presentation of a conceptual site model (CSM);
- Identify the remedial strategy(ies) to be adopted by an assessment of remedial options and development objectives; and
- Document the procedures and standards to be followed in order to remove the risks posed by contaminated soils, to make the site suitable for permissible land uses, while ensuring the protection of human health and the surrounding environment.

## Groundwater

As discussed in the JBS&G Phase 2 Report and RAP, groundwater has been assessed across the broader ATP precinct and no groundwater remediation is considered to be required.

## Acid Sulphate Soils

Previous investigations have considered the risk of ASS/PASS to be low, however there has reported to be uncertainty in the potential for ASS/PASS within natural soils at depth. Further consideration of the potential for ASS/PASS and management measures is required if development activities involve significant excavation of natural soils beneath the water table;

## Mitigation Measures

The objectives of this RAP are to characterise and document the known extent of environmental impact within the site via presentation of a conceptual site model (CSM), identify the remedial strategy(ies) to be adopted by an assessment of remedial options and development objectives; and document the procedures and standards to be followed in order to remove the risks posed by contaminated soils, to make the site suitable for permissible land uses, while ensuring the protection of human health and the surrounding environment.

The RAP includes the methodology and management for the following aspects:

- Remediation Scope of Works;
- Validation Plan;
- Soil Sampling;
- Unexpected finds and contingency plan; and
- Environmental and Health & safety.

Implementation of the EMP and a long-term Environment Management Plan (LTEMP) prepared by the Remediation Consultant for Site Auditor for approval, is required.

Subject to the successful implementation of the measures described in this RAP and the recommendations of a Remedial Environmental Management Plan (REMP) and Work Health and Safety Plan (WHSP), it is concluded that the site can be made suitable for the intended uses and that the risks posed by contamination can be managed in such a way as to be adequately protective of human health and the environment.

## 5.18 Wind Impacts

A Wind Assessment Report has been prepared by Cermak Peterka Petersen (CPP) and is provided at **Appendix I**.

The assessment was conducted on the basis that the pedestrian level wind environment for most locations would be classified as pedestrian standing or walking under the Lawson criterion. It was found that whilst wind conditions around the site are expected to be significantly affected by the addition of the proposed buildings, all locations would pass the distress criterion and it is considered that the design would meet the intended use of the space for pedestrian comfort and safety.

## Mitigation Measures

As no exceedance of the Lawson comfort and distress criterion were identified, CPP has not recommended any specific mitigation measures. Detail design of these spaces will dictate any further measures for wind mitigation and/or testing.

## 5.19 Reflectivity

A Reflectivity Study has been undertaken by Surface Design (refer to **Appendix J**) in relation to the proposed three buildings. The reflectivity study has been carried out in order to verify that the façades of the proposed buildings will not cause an unacceptable risk of solar reflections causing disability glare to drivers and pedestrians.

Surface Design undertook an assessment of 24 vantage points surrounding the site to understand risks of reflected glare. The conclusions from this study revealed that the risk of rogue reflections causing disability glare are limited and acceptable.

## Mitigation Measures

The assessment identifies the potential for rogue reflections on some elevations and recommends the adoption of mitigation measures to control these reflections, including through the selection of low reflectivity surfaces and the use of glare amelioration devices such as vertical or horizontal fin features.

## 5.20 BCA and Fire Safety

### BCA

A review of the proposal against the applicable requirements of the Building Code of Australia (BCA) 2015 has been undertaken by Advance Building Approvals (refer to **Appendix S**).

The report concludes that the proposed development is capable of achieving compliance with the BCA subject to the successful development of 'Alternate Solutions' for egress, evacuation management and smoke hazard management.

Such Performance Requirements together with further assessment of the building's atriums will be required prior to the issue of a Construction Certificate. Detailed construction drawings shall be provided at Construction Certificate application stage, demonstrating compliance with the BCA.

### Fire Safety

A fire engineering review of the design has been undertaken by ARUP (refer to **Appendix Q**). ARUP confirm that fire safety aspects of the development appear to be compliant with the Deemed to Satisfy Provisions of the BCA. ARUP however expect that performance based fire engineering solutions will be required during detailed design, but that there are no issues that would affect the building layouts arising from fire safety. Accordingly, ARUP confirm there are no impediments to the Minister issuing development consent.

## Mitigation Measures

The detailed design of the development must ensure that the proposal complies with the applicable requirements of the BCA 2015 or appropriate alternative solutions should be developed and verified by a qualified BCA Consultant and Fire Safety Engineer.

## 5.21 Social and Economic Impact

### 5.21.1 Economy and Employment

The NSW Government's number one priority is to improve the performance of the economy. Providing commercial floorspace for one of Australia's largest employers, CBA is critical to the economic success of the finance and technology sectors and has significant flow on effects to all aspects of the State's economy.

Mirvac's proposal to redevelop ATP underpins several of the NSW Government's 32 identified goals for action by 2021 and is key in reinforcing Sydney's status as Australia's global city and as a place to do business.

CBA's commitment to the precinct is in the form of one of the largest commercial leasing pre-commitments in Australian history and forms the basis of Mirvac's proposal. CBA seeks to occupy circa 95,000m<sup>2</sup> of commercial NLA, which will house circa 10,000 technology focused staff by 2019 and 2020.

CBA will become the predominate employer within the region and will lift the profile of ATP as a diverse provider of professional floorspace for high-technology and collaborative industries. It is envisaged that the total investment in this project will exceed \$1 billion. Further, the project will generate on-going financial and economic benefits for the surrounding precinct and for Sydney in general.

### 5.21.2 Retail Needs Analysis

Non-office floorspace within the proposal will largely comprise a variety of smaller scale retail and food and beverage style tenancies, of which the exact use and fit-out will be subject to future applications. This is to ensure flexibility for the anchor tenant to work with Mirvac in ensuring an appropriate mix of services are provided, which would best suit and primarily service the new employees of ATP.

Whilst the primary intention of the proposed retail and supermarket facilities is to cater for the new workforce to occupy the proposed buildings, the project will provide a high level of convenience for existing employees of ATP and will cater for surrounding residents.

The new retail and supermarket facilities will provide an opportunity for additional jobs, as well as provide a wider range of products available for sale in an area currently under supplied by supermarket floorspace.

It is concluded that the provision of these facilities will provide substantial positive economic impacts through increased productivity and in ensuring ATP is a desirable place to work. It is also noted expected that the impacts from the proposal would not threaten the viability of any retailers or centres throughout the surrounding area or limit the future on-going development of the Redfern-Waterloo and Eveleigh precincts.

### 5.21.3 Community Services and Facilities

In addition to delivering world-class business technology and collaborative workplace facilities, the project is also a major urban renewal undertaking that will deliver significant benefits for Sydney.

Key benefits to the community of the project include:

- New community office floorspace in excess of 1,000m<sup>2</sup>, which is proposed to be leased by Mirvac and CBA for the benefit of the community and not-for-profit organisations;



- Construction of two new child care facilities which will cater for a minimum 90 children per facility in a variety of ages;
- Provision of new gym accessible 24 hours, 7 days a week of approximately 450m<sup>2</sup> and is in a prominent landscaped setting;
- Enhancement of the existing multi-use sports courts to cater for a variety of sports;
- Upgrades to the active and passive recreational uses of the Vice Chancellor's Oval;
- Provision of an enhanced, enlarged and dynamic public domain to be enjoyed by workers and visitors alike;
- Providing improved permeability and better connections to surrounding areas, in particular to Redfern Railway Station; and
- Increased safety and security in the surrounding public domain.

#### 5.21.4 Cultural Assessment

A rich mix of historical, geographical, cultural and social influences has shaped the Australian Technology Park precinct. The public art strategy has been guided by the following objectives:

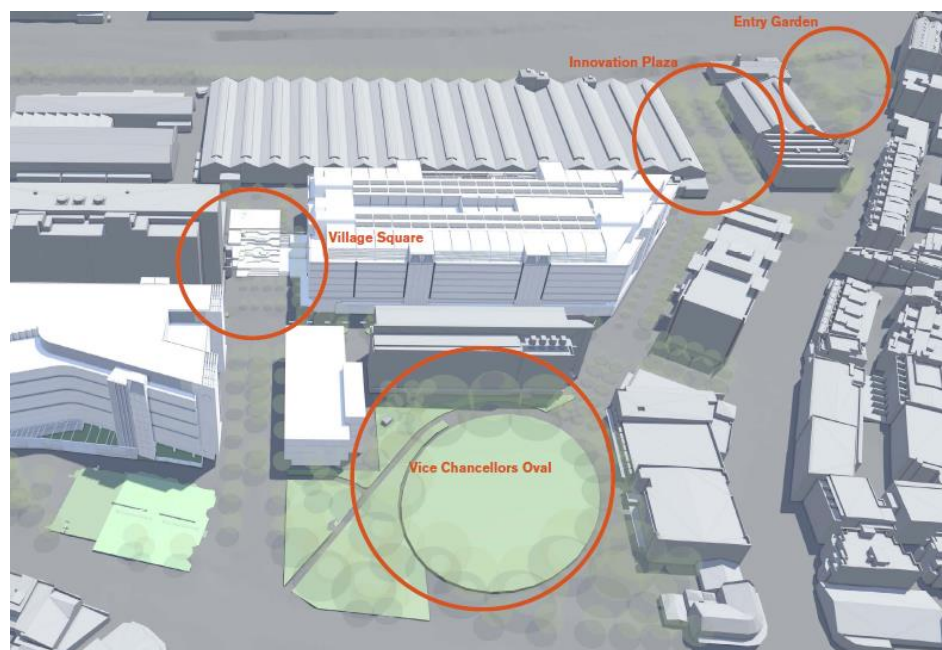
- Excellence;
- Diversity of Projects;
- Historical Information;
- Aboriginal Heritage;
- Creative Collaborations;
- Sustainable Sydney 2030;
- Landmark Projects; and
- Integrated Projects.

There are four areas that have been identified for public art initiatives and installations on the ATP site. These have been selected to best reflect the unique history of the site, the relationship of the site to the immediate context and wider key urban spaces, to build upon the existing site structure, and to respond to both the unique heritage of the site and the new design proposed.

The locations chosen complement the proposed landscape architecture works and the heritage offerings on the site - particularly the moveable heritage items to ultimately create a layered and vibrant public offering.

The four locations are listed as follows and are depicted in the following diagram at **Figure 54**.

- Entry Garden: Interpretive artwork;
- Innovation Plaza – Innovative artwork;
- Village Square – contemporary artwork
- Vice Chancellor's Oval – Sustainable local community artwork



**Figure 54** – Locations for further investigations for public art installations  
 Source: FJMT + Sissons Architects

The process planned for the Australian Technology Park Artwork Strategy involves the following steps:

- Appointment of Advisory Committee;
- Appointment of Curator/Consultant; and
- Selection of appropriate artists and artwork proposals meeting the criteria for the development and the City of Sydney Public Art Policy Criteria.

## 5.22 Crime and Public Safety

A Crime Prevention Through Environmental Design (CPTED) assessment has been undertaken by JBA (**Appendix T**). This report assesses the elements of crime, and the fear of crime that may be associated with the redevelopment of the site to accommodate the proposal.

The following tasks were undertaken in the preparation of this assessment:

- Review of key literature on CPTED by the Department of Attorney General and Justice Crime Prevention;
- Collection and analysis of local and NSW State crime statistics from the Bureau of Crime Statistics and Research (BOSCAR); and
- A crime risk assessment, in accordance with the current NSW policy and practice, of the following regulation and assessment principles:
  - 1. Surveillance
  - 2. Lighting/technical supervision
  - 3. Territorial reinforcement
  - 4. Environmental maintenance
  - 5. Activity and Space Management
  - 6. Access control
  - 7. Design, definition and designation.

The assessment finds the proposal suitable with regard to crime prevention and public safety, subject to recommendations. These recommendations relate to specific detailed design components to mitigate the impacts of crime and ensure occupants of the development are accommodated in a safe and positive environment.

### Mitigation Measures

- Provide way finding signage to reinforce visitors and employees/patrons perception of safety and legibility within the precinct. In particular, signage within the car parking areas should provide a clear means of identifying the lifts and pathways from the parking areas to the upper levels.
- Consult a qualified lighting engineer to ensure the correct lighting is provided to meet minimum Australia and New Zealand Lighting Standards and enable sufficient surveillance of the precinct (as relevant to the proposed development sites).
- Provide secure electronic access (card/ key controlled entries/ lifts and intercom systems) to prevent unauthorised access into the car parks, bicycle access corridors and upper floors of the new buildings.
- Consider the provision of CCTV coverage at primary entries into Buildings 1 and 2, and the Community Building. If deemed appropriate, this CCTV coverage should be provided in conjunction with bright lighting to ensure clear CCTV footage can be captured.
- Ensure the landscaping design does not give rise to concealment opportunities and does not restrict sightlines from the development overlooking public open spaces.
- Ensure mechanisms are in place for on-going maintenance of landscaping and the buildings, including:
  - rapid removal policy for vandalism repair and the removal of graffiti;
  - maintenance of all surrounding public spaces.; and
  - provision of rubbish bins.
- Use high quality materials for construction to lessen the likelihood of damage and help reduce maintenance costs.

## 5.23 Environmental and Construction Management

A Construction and Environmental Management Plan (CEMP) for the proposal has been prepared by Mirvac and is provided at **Appendix W**.

The CEMP outlines the actions and staging of construction deemed necessary to address the concerns of neighbouring properties, authorities and the requirements of the proposed anchor tenant (CBA), whilst maintaining a safe and productive construction site with efficient surrounding pedestrian/traffic movements.

Included within and as attachments to the CEMP are specific management plans which set out the procedures and measures to be adopted which will covering the following aspects of the proposed development:

- Construction Traffic Management;
- Noise and Vibration Management;
- Construction Waste Management;

- Sediment Control;
- Air Quality;
- Hazardous materials;
- Sustainability;
- Workplace Risk; and
- Site Management.

### Mitigation Measures

In order to mitigate against any adverse impacts during the construction phase of the proposal, the management measures provided in the CEMP (**Appendix W**) should be implemented. Furthermore, a detailed final CEMP should be prepared and submitted prior to the issue of the relevant Construction Certificate.

## 5.24 Ecologically Sustainable Development

The principles of ecologically sustainable development are set out in section 6(2) of the *Protection of the Environment Administration Act 1991* (NSW). The principles of ESD include intergenerational equity, the precautionary principle, conservation of biological diversity and ecological integrity and improved valuation, pricing and incentive mechanisms. The principles of ESD have informed the design, construction and proposed operation of the proposal.

It is appropriate for decisions made under the EP&A Act to have regard to the objects of the Act, as set out in Section 5 of the Act, including ESD.

The EP&A Act adopts the definition of ESD found in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of (over page):

- (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.*

Importantly, the ATP development is consistent with the principles of ESD as it meets the needs of the present without compromising the ability of future generations to meet their own needs. ESD design measures have been integrated into the design of the proposed buildings as detailed in the ESD Design Report prepared by ARUP (**Appendix P**) and as detailed at Section 3.10.

Benchmarking the buildings against Australian excellence (**Table 12**) has been carried out from the beginning of the design process. For that reason, the following minimum rating benchmarks were set for each building:

**Table 12** – ESD Benchmarking (in operation)

Building	Min Green Star Rating v.1.	Min NABERS Energy	Min NABERS Water
Building 1	6 stars	5 stars	4 stars
Building 2	6 stars	5 stars	4 stars
Community Building	5 stars	4.5 stars	3.5 stars

The proposed ESD initiatives will be developed during the next design stages by the design team to achieve a Green Star and NABERS targets. As buildings are responsible for 40% of CO<sub>2</sub> emissions there is need to further reduce their environmental impact in the coming years. This involves incorporating the flexibility required to accommodate mechanical systems and fitouts that feature energy efficient technologies and the ability to adapt to multiple uses.

Further, each principle of ESD as relevant to the proposed development is addressed on the following page.

### 5.24.1 Precautionary principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides 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. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment. Measures included within the proposed development to mitigate against possible future risks include:

- Reuse or recycling of existing building materials within the proposal wherever possible;
- Incorporation of high efficiency design features to reduce energy and water consumption;
- A design optimised to achieve high levels of public transport usage for workers and visitors of the precinct;
- Provision of a wide variety of supporting café, retail, child care, recreational and gym land uses in immediate proximity to support the needs of the new workforce, but to also expand the range of services available to the surrounding community; and
- Include stormwater treatment measures to eliminate present or future impacts on water quality.



When taking into account the above ESD measures, this EIS has not identified any serious threat of irreversible damage to the environment and therefore, the precautionary principle is not relevant to the proposal.

### 5.24.2 Intergenerational equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal, as part of the overall ATP precinct redevelopment, has been designed to benefit both the existing and future generations by:

- Continuing to maintaining heritage listed items for future generations to appreciate and enjoy;
- Implementing safeguards and management measures to protect environmental values;
- Facilitating job creation and the provision of new supporting facilities and services in close proximity to frequent public transport; and
- Supporting/delivering improvement to the public domain and amenity within the broader ATP precinct.

The proposal has integrated short and long-term social, financial and environmental considerations so that any foreseeable impacts are not left to be addressed by future generations. Issues with potential long term implications such as waste disposal would be avoided and/or minimised through construction planning and the application of safeguards and management measures described in this EIS and the appended technical reports.

### 5.24.3 Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration. The proposal would not have any significant effect on the biological diversity and ecological integrity of the study area. Design and management measures to reduce excavation within the site and reduce the export of gross pollutants into the waterway all contribute directly to the conservation of biological diversity and ecological integrity within the locality.

### 5.24.4 Improved valuation, pricing and incentive mechanisms

Mirvac was selected by UGDC to deliver the ATP project based on the economic, environmental and social merits of the proposal, which includes significant commercial office component with a focus on high-technology and collaborative uses. The proposal has undergone a detailed design process to ensure that the development ultimately achieves the best development outcome for the across all evaluation criteria.

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation will be implemented to ensure resources are used responsibly in the first instance in order to divert resources from landfill.

## 5.25 Development Contributions

Developer contributions in the Redfern Waterloo area may be levied under the following two plans.

### 5.25.1 Redfern Waterloo Affordable Housing Contributions Plan

The Affordable Housing Contributions Plan authorises the Minister for Planning to impose a condition on any approval granted to development to which the plan applies (such as the development the subject of this SSDA) requiring the payment of an affordable housing contribution.

Mirvac recognises the importance and social aims of this contributions plan, and accordingly will pay in full the required affordable housing contribution, determined in accordance with the plan. Based on the amount of proposed GFA, the affordable housing contribution Mirvac will pay will be in the order of \$8.24 Million (based on the 2014/2015 indexed contribution rate). This amount of contribution will lead to the delivery of some 17 affordable housing units (based on a delivery cost of \$470,000 per unit) within the Redfern-Waterloo area.

### 5.25.2 Redfern Waterloo Contributions Plan

The Contributions Plan reflects a typical development (Section 94A) levy plan. In this regard, the Plan authorises the Minister for Planning to impose a condition on any approval granted to development to which the plan (such as the development the subject of this SSDA) applies requiring the payment of a development levy.

The contribution rate/levy under the plan is of 2% of the cost of carrying out the development. Accordingly, a development contribution in the order of \$8.6 million is payable.

The contributions plan does provide for alternatives to the payment of the development levy. Such an alternative includes making an offer as part of a development application to carry out works or provide a material public benefit towards which the development levy is to be applied. If the Minister for Planning agrees with the offer, a condition of consent is able to be imposed requiring the works to be carried out or the material public benefit to be provided.

Mirvac proposes to make a contribution towards the provision of public facilities instead of payment of a development levy. More specifically, Mirvac offer under this SSDA to undertake works in which the development levy is to be applied which will be put towards the urban regeneration of ATP and the entire upgrade of the public domain within ATP.

The development levy is established to deliver the following works / public facilities across the Redfern Waterloo area:

- Public Domain – approximately \$15 Million;
- Road, Public Transport and Access – approximately \$19.9 million;
- Community Facilities – approximately \$1.2million; and
- Drainage - approximately \$100,000.

A significant and important component of the subject SSDA relates to the upgrades and improvements to the public realm across the entire ATP site to ensure that ATP functions as both a technology and community hub. Refer to Section 3.7 and **Appendix C** for specific details of the proposed extent of public domain/landscaping works proposed under this SSDA. High level, the proposed

development will deliver the following material public benefits in terms of the public domain:

- Extensive new streetscape planting including the addition of numerous trees;
- Substantial new planting throughout the precinct;
- New equal access ramp supporting access from ATP to Redfern station, providing the appropriate disabled access from the station to ATP;
- Provision of public art and heritage interpretation throughout the precinct;
- Provision of directional and information signage;
- Provision of bicycle parking throughout the precinct;
- Provision of new BBQ and picnic furniture throughout;
- Provision of free Wi-Fi offered within the precinct for users of both ATP and the wider community;
- Provision of large tables for gatherings and external working, including power outlets;
- Upgraded publicly accessible sports courts including resurfacing of the courts and new facilities;
- Substantial upgrade of existing turf/sports oval, including providing opportunities for spectator seating and group fitness and also the construction of a new children's play space;
- Upgrade of existing pathways and new shared zone;
- New street lighting and improved illumination of public areas;
- Provision of table tennis tables;
- Provision of new pedestrian crossings; and
- Provision of new and publicly accessible on-street parking – supporting access by the local community to the ATP and all of its new offerings/amenities.

Mirvac's vision for the precinct is one that embraces and integrates with the surrounding urban fabric/community and not one that is an insular technology park only accessible by workers. Accordingly the new ATP will be a vibrant and welcoming place for all, with this assured in perpetuity through rights of public access across the entire public realm.

These works have been costed (Capital Investment Value) to be in the order of \$25 million. This substantial amount of investment in the public domain shows Mirvac's commitment to deliver a high quality and long-lasting outcome for the site that will benefit not only existing and future workers across the ATP site but also the wider local community and Sydneysiders more broadly.

Mirvac will also be a long term owner and will therefore be the precinct manager within ATP, responsible for the maintenance, curation, and place making of the precinct. This will ensure that the public realm of ATP will remain of a high standard and quality for workers, visitors and the local community to be able to enjoy into the future.

The works proposed by Mirvac substantially exceed both:

- The development levy that would apply to the SSDA under the contributions plan, by more than \$16.4 million; and
- The total estimated public domain works planned to be delivered across the entire Redfern Waterloo Area, by more than \$10 million.

If Mirvac were to remove the proposed public domain works from the scope of the SSDA and just pay the development levy (where only a portion of this money would be expected to be allocated to public domain works), it would mean that significant public benefits would not be realised and would lead to a poorer urban design, built form, and streetscape outcome.

There is a clear mechanism under the contributions plan to deliver and undertake works in lieu of paying the required development levy. The proposed works not only relate to works that the development levy would be applied towards (i.e. public domain) but further provide a material public benefit.

Finally, it is noted that in accordance with Section 94B of the EP&A Act, the Minister must have regard to the contributions plan but is not bound to strictly impose a condition in accordance with it.

## 5.26 Site Suitability

Having regard to the characteristics of the site and its location, the proposed development is considered suitable for the ATP site as it:

- Will contribute to urban renewal of Sydney's CBD fringe area;
- Will contribute to the on-going development of a diverse and vibrant knowledge and technology park;
- Is capable of being developed in a manner that will minimise impacts to the natural, artificial, historical, and environmental qualities of the ATP site; and
- Will result in only minor environmental impacts that can be appropriately managed and mitigated.

Conversely, the ATP site is considered suitable for the proposed development in that:

- The location of the ATP site at the edge of the Sydney CBD and in the vicinity of existing transport, other professional businesses and organisation and educational institutions is considered to be an optimal location for CBA's new Sydney campus;
- The present ATP development zones are underutilised and are in need of urban renewal and improved connections and integration with the surrounding locality;
- It is well served by frequent existing and planned public transport; and
- Is in close proximity to high quality public open space (existing and proposed) to foster a good lifestyle for new workers within the precinct.

## 5.27 Public Interest

The proposed development is considered to be in the public interest as it will:

- Contribute to on-going redevelopment of the ATP precinct and reposition it as one of Australia's leading diversified technology and knowledge parks;
- Deliver world-class working, learning, training and collaboration space for the anchor tenant of CBA;
- Minimise urban sprawl and the costs to society associated with this inefficient form of growth;
- Enhance connectivity around and through the Precinct and optimise the quality of the public domain;
- Demonstrate excellence in design and environmental sustainability;

- Facilitate high levels of public transport usage for workers and visitors of the precinct;
- Maximise the direct and indirect economic benefits to NSW from the project;
- Deliver a rejuvenated ATP precinct that preserves and embraces the site's rich heritage;
- Create a more vibrant and activated precinct that provides a range of day to day services and offerings for employees, visitors and the local community; and
- Create new jobs during the construction phase of the proposal.



## 6.0 Environmental Risk Assessment

The Environmental Risk Assessment (ERA) establishes a residual risk by reviewing the significance of environmental impacts and the ability to manage those impacts. The ERA for SSDA 7317 has been adapted from Australian Standard AS4369.1999 Risk Management and Environmental Risk Tools.

In accordance with the SEARs, the ERA addresses the following significant risk issues:

- The adequacy of baseline data;
- The potential cumulative impacts arising from other developments in the vicinity of the Site; and
- Measures to avoid, minimise, offset the predicted impacts where necessary involving the preparation of detailed contingency plans for managing any significant risk to the environment.

**Figure 55** indicates the significance of environmental impacts and assigns a value between 1 and 10 based on:

- The receiving environment;
- The level of understanding of the type and extent of impacts; and
- The likely community response to the environmental consequence of the project;

The manageability of environmental impact is assigned a value between 1 and 5 based on:

- The complexity of mitigation measures;
- The known level of performance of the safeguards proposed; and
- The opportunity for adaptive management.

The sum of the values assigned provides an indicative ranking of potential residual impacts after the mitigation measures are implemented.

Significance of impact	Manageability of impact				
	5 Complex	4 Substantial	3 Elementary	2 Standard	1 Simple
1 – Low	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)	2 (Low)
2 – Minor	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)	3 (Low)
3 – Moderate	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)	4 (Low/Medium)
4 – High	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)	5 (Low/Medium)
5 – Extreme	10 (High)	9 (High)	8 (High/Medium)	7 (High/Medium)	6 (Medium)

**Figure 55** – Risk Assessment Matrix

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
Key: C – Construction, O: Operation						
Visual and Views	O	<ul style="list-style-type: none"><li>Visual impact from surrounding residents and public places</li></ul>	<ul style="list-style-type: none"><li>The proposal achieves a reasonable balance between the protection of private views and the protection of public domain views.</li></ul>	2	2	4 Low / medium
Transport and Accessibility	C+O	<ul style="list-style-type: none"><li>Increased traffic on local roads</li><li>Increased parking on local roads</li></ul>	<ul style="list-style-type: none"><li>Based on the existing intersection performance and the likely traffic to be generated from the proposed development, all key intersections will perform at an acceptable level of service during the peak periods. As such, no mitigation measures are required to manage the surrounding road network.</li><li>Sufficient parking is accommodated within the ATP to meet the needs of the proposal and the number of parking space is less than the maximum number permissible under SEPP Major Development 2005.</li></ul>	2	2	4 Low / medium
Non-Indigenous Heritage	C+O	<ul style="list-style-type: none"><li>Impact on heritage items in the vicinity.</li></ul>	<ul style="list-style-type: none"><li>The proposed development will not result in any unreasonable or significant impact on the significance or value of adjoining Items of Heritage Significance.</li><li>A Heritage Interpretation Strategy for the ATP site is presently being prepared in accordance with the NSW Heritage Manual and the OEH's Heritage Interpretation Policy.</li></ul>	3	2	5 Low / medium
Archaeology	C	<ul style="list-style-type: none"><li>Impacts to archaeological items of significance.</li></ul>	<ul style="list-style-type: none"><li>The proposed works are unlikely to have any impact on Aboriginal objects or sites. Should an unexpected archaeological resource be found, then works would cease in the immediate area and archaeological advice sought.</li><li>Depending on the nature of the find and its confirmation as an Aboriginal object, then the relevant regulatory authorities would be contacted for further advice.</li></ul>	1	1	2 Low
Noise and Vibration	C+O	<ul style="list-style-type: none"><li>Increase in noise levels during construction activities</li><li>Adverse noise impacts on proposed uses, such as rail/traffic noise</li><li>Adverse noise impacts from proposed uses on surrounding receivers</li></ul>	<p>Construction</p> <ul style="list-style-type: none"><li>At the commencement of operation for each plant or activity on site, which has the potential to generate significant vibration levels, attended vibration monitoring should be undertaken so to refine the recommended minimum working distances;</li><li>Where vibration is found to be excessive, management measures shall be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller rock breakers, using alternative processes or establishment of larger minimum working distances;</li><li>Carry out additional vibration monitoring when construction activities are at the nearest point to the nearby sensitive structures. This monitoring may signal to the contractor by</li></ul>	3	2	5 Low / medium

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
			<p>way of a buzzer or flashing light, when levels approach/exceed the recommended limits;</p> <ul style="list-style-type: none"> <li>Before, during and after the demolition and construction stages we recommend preparation of a dilapidation report on the state of the existing buildings sharing the property boundary with the site; and</li> <li>It is further recommended that a vibration complaints management system be established prior to the commencement of these works.</li> </ul> <p>Operational</p> <ul style="list-style-type: none"> <li>Childcare: the following noise mitigation measures have been included in the assessment: Building 1 -1.8m high solid barrier around the perimeter of the outdoor play area and Community -1.5m high solid barrier around the southern perimeter of the outdoor play area.</li> <li>Retail/Supermarket: a detailed review of the retail uses should be carried out during the design development stage in order to confirm appropriate noise mitigation measures have been incorporated into the development. Additional measures such as acoustically absorptive treatment to soffits or external covered areas and internal spaces may be considered to improve the acoustic amenity of the areas and increase noise mitigation. With regard to the proposed 24hour supermarket, operational noise would be limited to mechanical equipment which would be subject to detailed design.</li> <li>Plant: <ul style="list-style-type: none"> <li>Acoustic assessment of mechanical services equipment should be undertaken during the detail design phase of the development to ensure that the cumulative noise of all equipment does not exceed the applicable noise criteria. Development consent conditions typically require detailed assessment of mechanical plant and equipment prior to construction.</li> <li>Noise control treatment can affect the operation of the mechanical services system. An acoustic engineer should be consulted during the initial design phase of mechanical services system to reduce potential redesign of the mechanical system.</li> <li>Mechanical plant noise emission can be controlled by appropriate mechanical system design and implementation of common engineering methods, which may include procurement of 'quiet' plant, strategic positioning of plant away from sensitive neighbouring premises to maximise intervening acoustic shielding between the plant</li> </ul> </li> </ul>			

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
			<p>and sensitive neighbouring premises, commercially available acoustic attenuators for air discharge and air intakes of plant, acoustically lined and lagged ductwork and acoustic barriers between plant, sensitive neighbouring premises and partial or complete acoustic enclosures over plant</p> <ul style="list-style-type: none"> <li>– The specification and location of mechanical plant should be confirmed prior to installation on site, and</li> <li>– Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 '<i>Rotating and Reciprocating Machinery –Mechanical Vibration</i>'.</li> </ul>			
Infrastructure and Utilities	C+O	<ul style="list-style-type: none"> <li>▪ Adequate connection to infrastructure and utilities;</li> <li>▪ Impacting on existing infrastructure below the site</li> </ul>	<ul style="list-style-type: none"> <li>▪ Undertake a desk-top investigation of existing services using Dial Before You Dig information and site observations;</li> <li>▪ Undertake a site survey to accurately locate existing infrastructure assets where practical;</li> <li>▪ Undertake site exploration works where considered necessary to more accurately locate existing infrastructure assets and test for unknown services;</li> <li>▪ Continue consultation with utility providers to confirm location of services and to obtain all necessary consents to work in their vicinity;</li> <li>▪ Incorporate utility technical and hazard requirements into the design and construction documentation;</li> <li>▪ Ensure safe work methods statements and inspection and test plans are prepared by accredited contractors;</li> <li>▪ Implement and record pre-start work checklists;</li> <li>▪ Conduct workshops with utility providers where diversion of, connection to or construction close to critical assets is required; and</li> <li>▪ Ensure field safety inspectors are present during critical works as determined by each utility provider.</li> </ul> <p>As design progresses or as new information becomes available, the above process will be adjusted or supplemented as required to ensure existing infrastructure assets are adequately protected. Ongoing consultation and design development with the relevant utility providers should continue to be undertaken throughout the process.</p>	3	2	5 Low / medium

Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
Railway Infrastructure	C	<ul style="list-style-type: none"> <li>Impacting on existing railway infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Adherence to detailed mitigation measures as detailed within the Geotechnical Report (<b>Appendix K</b>).</li> </ul>	3	2	5 Low / medium
Operational Waste Management	O	<ul style="list-style-type: none"> <li>Generation of waste</li> </ul>	<ul style="list-style-type: none"> <li>Bins, storage locations and collection to be in accordance with the submitted Waste Management Plan.</li> </ul>	1	1	2 Low
Water Cycle Management	O	<ul style="list-style-type: none"> <li>Potential stormwater impacts</li> </ul>	<ul style="list-style-type: none"> <li>Implement the mitigation measures proposed in the Stormwaters &amp; WSUD Report (<b>Appendix N and P</b>).</li> </ul>	2	2	4 Low / medium
Reflectivity	O	<ul style="list-style-type: none"> <li>Adverse solar reflectivity glare to motorists and pedestrians</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation of rogue reflections will be controlled through the selection of low reflectivity surfaces and the use of glare amelioration devices such as vertical or horizontal fin features.</li> </ul>	2	2	4 Low / medium
Geotechnical Issues	C	<ul style="list-style-type: none"> <li>Instability of future development</li> </ul>	<ul style="list-style-type: none"> <li>Excavation and piling stages of construction to minimise damage to adjacent property and infrastructure</li> </ul>	2	2	4 Low / medium
Contamination	C+O	<ul style="list-style-type: none"> <li>Exposure of contamination or hazardous materials during construction and operation</li> </ul>	<ul style="list-style-type: none"> <li>Remediation to be undertaken in accordance with the Remedial Action Plan prepared by JBS&amp;G, 8 December 2015 (refer to <b>Appendix M</b>).</li> </ul>	3	1	4 Low
Wind Impact	O	<ul style="list-style-type: none"> <li>Adverse wind environment</li> </ul>	<ul style="list-style-type: none"> <li>As no exceedance of the Lawson comfort and distress criterion were identified, CPP has not recommended any specific mitigation measures (subject to detailed design).</li> </ul>	3	2	5 Low / medium
Crime and Public Safety	O	<ul style="list-style-type: none"> <li>Anti-social intimidating behaviour</li> </ul>	<p>The following mitigation measures should be implemented to reduce the risk and opportunities for crime/anti-social behaviour:</p> <ul style="list-style-type: none"> <li>Provide way finding signage to reinforce visitors and employees/patrons perception of safety and legibility within the precinct. In particular, signage within the car parking areas should provide a clear means of identifying the lifts and pathways from the parking areas to the upper levels.</li> <li>Consult a qualified lighting engineer to ensure the correct lighting is provided to meet minimum Australia and New Zealand Lighting Standards and enable sufficient surveillance of the precinct (as relevant to the proposed development sites).</li> <li>Provide secure electronic access (card/ key controlled entries/ lifts and intercom systems) to prevent unauthorised access into the car parks, bicycle access corridors and upper floors of the new buildings.</li> <li>Consider the provision of CCTV coverage at primary entries into Buildings 1 and 2, and the Community Building. If deemed appropriate, this CCTV coverage should be provided</li> </ul>	2	1	3 Low



Item	Phase	Potential Environmental Impact	Proposed Mitigation Measures and / or Comment	Risk Assessment		
				Significance of Impact	Manageability of Impact	Residual Impact
			<p>in conjunction with bright lighting to ensure clear CCTV footage can be captured.</p> <ul style="list-style-type: none"> <li>▪ Ensure the landscaping design does not give rise to concealment opportunities and does not restrict sightlines from the development overlooking public open spaces.</li> <li>▪ Ensure mechanisms are in place for on-going maintenance of landscaping and the buildings, including: <ul style="list-style-type: none"> <li>– rapid removal policy for vandalism repair and the removal of graffiti;</li> <li>– maintenance of all surrounding public spaces.; and</li> <li>– provision of rubbish bins.</li> </ul> </li> <li>▪ Use high quality materials for construction to lessen the likelihood of damage and help reduce maintenance costs.</li> </ul>			
Environmental and Construction Management	C	<ul style="list-style-type: none"> <li>▪ Noise, dust, air quality and traffic impacts</li> </ul>	<ul style="list-style-type: none"> <li>▪ Works are to be carried out in accordance with the Construction Management Plan which details full mitigation measures to manage environmental impacts (<b>Appendix W</b>).</li> </ul>	3	2	5 Low / medium

## 7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in **Table 13** below. These measures have been derived from the previous assessment in Section 5.0 and those detailed in appended consultants' reports.

**Table 13 – Mitigation Measures**

Mitigation Measures
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### Construction Traffic Generation

The following mitigation measures have been recommended by Mirvac:

- Exit points on each site will be manned by qualified Traffic Controllers who will be responsible for managing both vehicular and pedestrian traffic movements;
- A Mirvac Site Specific Workplace Risk Management Plan (WRMP), will be implemented prior to the commencement of construction and be updated from time to time to reflect the current stage of site works;
- Signage will be established at the precinct entry and exit points to alert pedestrians and other drivers to the movement of construction traffic. Visitors to the sites will be escorted at all times by Mirvac Site Staff and will be provided with a defined entry path from the point of entry;
- Temporary road closures, single lane access and relocations during the construction period will be subject to coordination with the appropriate authorities; and
- All traffic related issues and changes shall also be presented to Stakeholders as part of the consultation process. These will, wherever and whenever possible, be carried out in non-peak periods.

It is noted that a detailed traffic and pedestrian traffic management plan will be prepared and provided prior to the issue of the relevant Construction Certificate

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### Heritage and Archaeology

- A Heritage Interpretation Strategy for the ATP site is presently being prepared in accordance with the NSW Heritage Manual and the OEH's Heritage Interpretation Policy.
- Should an unexpected archaeological resource be found, then works would cease in the immediate area and archaeological advice sought. Depending on the nature of the find and its confirmation as an Aboriginal object, then the relevant regulatory authorities would be contacted for further advice

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### Accessibility

In order to ensure equal access is provided throughout the proposed development, the detailed design of the proposal will need to ensure compliance with the relevant accessibility provisions of the BCA 2015 and other applicable legislation.

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## Mitigation Measures

### Noise and Vibration

#### Construction

- At the commencement of operation for each plant or activity on site, which has the potential to generate significant vibration levels, attended vibration monitoring should be undertaken so to refine the recommended minimum working distances;
- Where vibration is found to be excessive, management measures shall be implemented to ensure vibration compliance is achieved. Management measures may include modification of construction methods such as using smaller rock breakers, using alternative processes or establishment of larger minimum working distances;
- Carry out additional vibration monitoring when construction activities are at the nearest point to the nearby sensitive structures. This monitoring may signal to the contractor by way of a buzzer or flashing light, when levels approach/exceed the recommended limits;
- Before, during and after the demolition and construction stages we recommend preparation of a dilapidation report on the state of the existing buildings sharing the property boundary with the site; and
- It is further recommended that a vibration complaints management system be established prior to the commencement of these works.

#### Operational

- Childcare: the following noise mitigation measures have been included in the assessment: Building 1 -1.8m high solid barrier around the perimeter of the outdoor play area and Community -1.5m high solid barrier around the southern perimeter of the outdoor play area.
- Retail/Supermarket: a detailed review of the retail uses should be carried out during the design development stage in order to confirm appropriate noise mitigation measures have been incorporated into the development. Additional measures such as acoustically absorptive treatment to soffits or external covered areas and internal spaces may be considered to improve the acoustic amenity of the areas and increase noise mitigation. With regard to the proposed 24hour supermarket, operational noise would be limited to mechanical equipment which would be subject to detailed design.
- Plant:
  - Acoustic assessment of mechanical services equipment should be undertaken during the detail design phase of the development to ensure that the cumulative noise of all equipment does not exceed the applicable noise criteria. Development consent conditions typically require detailed assessment of mechanical plant and equipment prior to construction.
  - Noise control treatment can affect the operation of the mechanical services system. An acoustic engineer should be consulted during the initial design phase of mechanical services system to reduce potential redesign of the mechanical system.
  - Mechanical plant noise emission can be controlled by appropriate mechanical system design and implementation of common engineering methods, which may include procurement of 'quiet' plant, strategic positioning of plant away from sensitive neighbouring premises to maximise intervening acoustic shielding between the plant and sensitive neighbouring premises, commercially available acoustic attenuators for air discharge and air intakes of plant, acoustically lined and lagged ductwork

#### Mitigation Measures

and acoustic barriers between plant, sensitive neighbouring premises and partial or complete acoustic enclosures over plant

- The specification and location of mechanical plant should be confirmed prior to installation on site, and
- Fans shall be mounted on vibration isolators and balanced in accordance with Australian Standard 2625 '*Rotating and Reciprocating Machinery –Mechanical Vibration*'.

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#### Civil Infrastructure and Utilities

In light of the location of existing utilities infrastructure over the site and the nature of the proposed development, potential mitigation measures may include the following (to be determined prior to the Construction Certificate process):

- Undertake a desk-top investigation of existing services using Dial Before You Dig information and site observations;
- Undertake a site survey to accurately locate existing infrastructure assets where practical;
- Undertake site exploration works where considered necessary to more accurately locate existing infrastructure assets and test for unknown services;
- Continue consultation with utility providers to confirm location of services and to obtain all necessary consents to work in their vicinity;
- Incorporate utility technical and hazard requirements into the design and construction documentation;
- Ensure safe work methods statements and inspection and test plans are prepared by accredited contractors;
- Implement and record pre-start work checklists;
- Conduct workshops with utility providers where diversion of, connection to or construction close to critical assets is required; and
- Ensure field safety inspectors are present during critical works as determined by each utility provider.

As design progresses or as new information becomes available, the above process will be adjusted or supplemented as required to ensure existing infrastructure assets are adequately protected. Ongoing consultation and design development with the relevant utility providers should continue to be undertaken throughout the process.

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## Mitigation Measures

### Railway Infrastructure

Douglas Partners confirm in their Preliminary Geotechnical Report (**Appendix K**) the following mitigation measures for the existing railway structures in close proximity to the site:

- Based on the supplied concept stage drawings for the proposed building and on the rail tunnel requirements, the following potential geotechnical constraints have been identified:
- Based on the estimated depth of the tunnel adjacent to Building 1, the line drawn from the base of the existing tunnel is estimated to intercept the ground surface at the southern boundary of the proposed building. Consequently, all footings for the building will need to be founded below the current surface level. Since the building is proposed to be founded on rock, which is estimated to be below RL 6 m AHD, at an approximate depth of 10 m, the rail requirements do not pose a geotechnical constraint for the foundations of the proposed building. The proposed foundation method of bored piles socketed into rock or CFA piles are viable foundation methods.
- During the demolition and construction phase for Building 1 an approximately 5 m wide exclusion zone should be established parallel to the boundary with the rail easement above the tunnel. No large earthmoving machinery or crane should be allowed in this exclusion zone and weight restriction should be in place for material storage.
- A dilapidation survey will need to be completed for the section of the tunnel parallel to Building 1, i.e. from the corner of Davey and Henderson Roads to the south-western corner of Lot 9.
- No bulk excavation is planned for Building 1, therefore in DP's opinion there should be no need to carry out a 3D finite element analysis.
- Should the Vice Chancellors Oval be used for stockpiling excavated filling or other materials, the stockpile should be restricted to the area north of the tunnel. If the portion of the oval over the tunnel is required, the stockpile height will need to be restricted to a maximum of 2 m.

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### Operational Waste Management

In order to appropriately manage and mitigate any adverse impacts arising from waste, the different components of the Waste Management Plan should be implemented into the operation of the proposed development.

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## Mitigation Measures

### Water Cycle Management

#### Flooding and Stormwater

It is recommended that the proposed stormwater modifications, amplification and connection works are carried out to ensure stormwater is adequately managed.

#### Water Quality

To appropriately manage and mitigate stormwater runoff on the site and achieve the established water quality targets, ARUP have recommended a variety of measures to be incorporated within the detailed design prior to the issue of a construction certificate, which may include:

- Bio-swales;
- Rain gardens;
- Rainwater harvesting tanks;
- Proprietary treatment tanks; and
- Gross Pollutant Traps.

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### Geotechnical

No specific mitigation measures are required as the proposal is considered geotechnically feasible. Douglas Partners does however provide specific recommendations during the excavation and piling stages of construction to minimise damage to adjacent property and infrastructure.

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### Contamination

The objectives of this RAP are to characterise and document the known extent of environmental impact within the site via presentation of a conceptual site model (CSM), identify the remedial strategy(ies) to be adopted by an assessment of remedial options and development objectives; and document the procedures and standards to be followed in order to remove the risks posed by contaminated soils, to make the site suitable for permissible land uses, while ensuring the protection of human health and the surrounding environment. The RAP includes the methodology and management for the following aspects:

- Remediation Scope of Works;
- Validation Plan;
- Soil Sampling;
- Unexpected finds and contingency plan; and
- Environmental and Health & safety.

Implementation of the EMP and a long-term Environment Management Plan (LTEMP) prepared by the Remediation Consultant for Site Auditor for approval, is required. Subject to the successful implementation of the measures described in this RAP and the recommendations of a Remedial Environmental Management Plan (REMP) and Work Health and Safety Plan (WHSP), it is concluded that the site can be made suitable for the intended uses and that the risks posed by contamination can be managed in such a way as to be adequately protective of human health and the environment.

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## Mitigation Measures

### Wind Impacts

As no exceedance of the Lawson comfort and distress criterion were identified, CPP has not recommended any specific mitigation measures. Detail design of these spaces will dictate any further measures for wind mitigation and/or testing.

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### Reflectivity

- All exterior façade elements should limit light reflectivity to 20% or less.
- Mitigation of rogue reflections will be controlled through the selection of low reflectivity surfaces and the use of glare amelioration devices such as vertical or horizontal fin features. This will require further review and detailed design with the design team.

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### BCA and Fire Safety

The detailed design of the development must ensure that the proposal complies with the applicable requirements of the BCA 2015 or appropriate alternative solutions should be developed and verified by a qualified BCA Consultant or Fire Safety Engineer.

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### Crime and Public Safety

- Provide way finding signage to reinforce visitors and employees/patrons perception of safety and legibility within the precinct. In particular, signage within the car parking areas should provide a clear means of identifying the lifts and pathways from the parking areas to the upper levels.
- Consult a qualified lighting engineer to ensure the correct lighting is provided to meet minimum Australia and New Zealand Lighting Standards and enable sufficient surveillance of the precinct (as relevant to the proposed development sites).
- Provide secure electronic access (card/ key controlled entries/ lifts and intercom systems) to prevent unauthorised access into the car parks, bicycle access corridors and upper floors of the new buildings.
- Consider the provision of CCTV coverage at primary entries into Buildings 1 and 2, and the Community Building. If deemed appropriate, this CCTV coverage should be provided in conjunction with bright lighting to ensure clear CCTV footage can be captured.
- Ensure the landscaping design does not give rise to concealment opportunities and does not restrict sightlines from the development overlooking public open spaces.
- Ensure mechanisms are in place for on-going maintenance of landscaping and the buildings, including:
  - rapid removal policy for vandalism repair and the removal of graffiti;
  - maintenance of all surrounding public spaces.; and
  - provision of rubbish bins.
- Use high quality materials for construction to lessen the likelihood of damage and help reduce maintenance costs.

#### Mitigation Measures

##### **Environmental and Construction Management**

In order to mitigate against any adverse impacts during the construction phase of the proposal, the management measures provided in the CMP (**Appendix W**) should be implemented. Furthermore, a detailed final CMP should be submitted prior to the issue of the relevant Construction Certificate.

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## 8.0 Conclusion and Justification of the Proposal

This Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the proposed redevelopment of Lots 8, 9 and 12 (substantial development zones) and Lots 10, 13 and 501 (public domain works) within ATP, Eveleigh.

The EIS has addressed the issues outlined in the SEARs (**Appendix A**) and accords with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* with regards to consideration of relevant environmental planning instruments, built form and design excellence, social and environmental impacts including heritage, traffic, noise, construction impacts and stormwater management.

Having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development, the carrying out of the project is justified for the following reasons:

- The proposal is permissible with consent and meets the objectives of all relevant planning controls for the site;
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2(7)(4) of the *Environmental Planning and Assessment Regulation 2000*;
- The proposed development is generally consistent with the land use, built form controls and design guidelines for ATP, as prepared under the *Redfern-Waterloo Built Environment Plan 1*;
- The site is adequately serviced with potable water and stormwater infrastructure and electrical and communication services;
- The proposal will not result in unreasonable or unmanageable environmental impacts;
- The proposal will result in the provision of a vibrant collaborative and technology based business park for CBA, with associated retail, gym, supermarket, child care and community-based floorspace;
- The proposal will support the strategic objectives for Sydney and will result in positive economic impacts on the surrounding locality and on the wider region;
- The proposal will achieve design excellence;
- The proposal will deliver significant improvements to the public domain; and
- The proposal will support the provision of more than 10,000 jobs located within a highly accessible location.

Given the planning merits described above, and the significant public benefits associated with the proposed development, it is recommended that this application be approved.