State Significant Development Application
SSD 6376 Environmental Impact Statement

Block 11, Central Park
Mixed Use Development
Submitted to Department of Planning and Environment
On Behalf of Frasers Broadway Pty Ltd
## Contents

### 1.0 Introduction
- 1.1 Overview of Proposed Development 1
- 1.2 Background to the Development 2
- 1.3 Analysis of Alternatives 4
- 1.4 Director General’s Requirements 4
- 1.1 Project Team 7

### 2.0 Site Analysis
- 2.1 Site Description 8
- 2.2 Existing Site 8
- 2.3 Surrounding Development 12

### 3.0 Description of the Development
- 3.1 Design / Urban Design Principles 18
- 3.2 Numerical Overview 19
- 3.3 Demolition and Site Preparation 20
- 3.4 Infrastructure and Services 20
- 3.5 Built Form 20
- 3.6 Gross Floor Area 24
- 3.7 Apartment Mix and Size 25
- 3.8 Communal Areas 25
- 3.9 Retail Uses 26
- 3.10 Childcare Centre 27
- 3.11 Landscaping and Public Domain 28
- 3.12 Site Access and Parking 30
- 3.13 Heritage Works 32
- 3.14 Ecologically Sustainable Development 33
- 3.15 Signage 33
- 3.16 Subdivision 33
- 3.17 Waste Management 33
- 3.18 Building Services 34

### 4.0 Consultation
- 4.1 Background 35
- 4.2 Consultation Undertaken 35
- 4.3 Outcomes 36

### 5.0 Environmental Assessment
- 5.1 Director-General’s Environmental Assessment Requirements 37
- 5.2 Compliance with Relevant Planning Policies 37
- 5.3 Compliance with Environmental Planning Instruments 39
- 5.4 Design Excellence 41
- 5.5 Land Use 42
- 5.6 Consistency with the Concept Plan 43
- 5.7 Built Form and Urban Design 46
- 5.8 Environmental and Residential Amenity 46
- 5.9 Overshadowing and Solar Access 49
- 5.10 Wind 50
- 5.11 Reflectivity 51
- 5.12 Childcare Requirements 51
- 5.13 Heritage 51
## Contents

5.14 Transport and Accessibility .......................... 52  
5.15 Ecologically Sustainable Development ............... 56  
5.16 Crime Prevention Through Environmental Design .... 57  
5.17 Acoustic Impacts .................................... 59  
5.18 Water Management .................................. 62  
5.19 Waste Management .................................. 63  
5.20 Construction Management ............................ 65  
5.21 Development Staging ................................ 67  
5.22 BCA .................................................... 67  
5.23 Accessibility .......................................... 67  
5.24 Fire Safety ........................................... 68  
5.25 Contamination ..................................... 68  
5.26 Geotechnical ......................................... 68  
5.27 Contributions ....................................... 69  
5.28 Site Suitability ...................................... 69  
5.29 Public Interest ........................................ 69  

6.0 Conclusion ............................................. 71  
7.0 Mitigation Measures .................................... 72  

### Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location plan</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Locational context within the Central Park site</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Southern boundary of the site adjoining Wellington Street</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Western boundary of the subject site adjoining Balfour Street Park</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Castle Connell Hotel</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Chippendale Green (left) and The Mark (right) located north of the site</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>Regent Street Mortuary Station building</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>Various photos of building on the southern side of Wellington Street, south of the site</td>
<td>14</td>
</tr>
<tr>
<td>9</td>
<td>Land uses to the southern side of O’Connor Street, west of the site</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Balfour Street Park located west of the subject site</td>
<td>15</td>
</tr>
<tr>
<td>11</td>
<td>Perspective of the proposal viewed from the north-east</td>
<td>17</td>
</tr>
<tr>
<td>12</td>
<td>Perspective of the proposal viewed from O’Connor Street</td>
<td>17</td>
</tr>
<tr>
<td>13</td>
<td>Perspective of the proposal viewed from Kensington Street looking west</td>
<td>18</td>
</tr>
<tr>
<td>14</td>
<td>Proposed envelope – viewed from the east</td>
<td>21</td>
</tr>
<tr>
<td>15</td>
<td>Proposed envelope – viewed from above (south)</td>
<td>22</td>
</tr>
<tr>
<td>16</td>
<td>Eastern elevation of the proposed building – showing the maximum height</td>
<td>23</td>
</tr>
<tr>
<td>17</td>
<td>southern elevation of the proposal showing storey numbers</td>
<td>23</td>
</tr>
<tr>
<td>18</td>
<td>North-east Section of the proposal showing uses</td>
<td>24</td>
</tr>
<tr>
<td>19</td>
<td>Level 9 outdoor communal space</td>
<td>25</td>
</tr>
<tr>
<td>20</td>
<td>Location of internal communal areas (shown in red)</td>
<td>26</td>
</tr>
<tr>
<td>21</td>
<td>Location of Retail Tenancies</td>
<td>26</td>
</tr>
<tr>
<td>22</td>
<td>Location of the Childcare Centre space (shown in red at the eastern end of the building – level 1)</td>
<td>27</td>
</tr>
<tr>
<td>23</td>
<td>Areas of landscaping across the site</td>
<td>28</td>
</tr>
</tbody>
</table>
## Contents

24 Section showing landscaped planters, walkways and sloping turf 29  
25 Elevation of ground level landscaping showing sloping turf mounds 29  
26 Proposed O’Connor and Kensington Street streetscapes 30  
27 Pedestrian and cycle connections 31  
28 Underground Tank interpretation principles 32  
29 Comparison diagram between concept plan and proposal (Concept Plan shown in red – proposal shown in white) 43  
30 Existing and proposed landscaped area 46  
31 Ventilation strategy - extract 48  
32 Overshadowing Comparison – Wellington Street (yellow shows increased solar access) 50

## Tables

1 Modifications to approved Concept Plan MP06_0171 3  
2 Other applications relating to the Central Park site 3  
3 Director General’s Requirements 4  
4 Key development information 19  
5 Uses and GFA by level 24  
6 Proposed Internal apartment sizes 25  
7 Bicycle parking provision 31  
8 Car parking provision 31  
9 Consistency with relevant strategies, policies and guidelines 37  
10 Consistency with relevant environmental planning instruments 39  
11 Objects of the EP&A Act 1979 40  
12 Increased site traffic generation 52  
13 Measured Traffic Noise Levels 59  
14 Background Noise Levels 59  
15 Glazing Construction – Residential 61  
16 Centralised Storage Rooms - Residential 64  
17 Centralised Storage Rooms – non-residential 64  
18 Mitigation Measures 72

## Appendices

A Architectural Plans  
FJMT

B Architectural Design Report  
FJMT

C Survey Plan  
Degotardi Smith & Partners
Contents

D  Quantity Surveyor Report
    Slattery

E  Landscaping and Public Domain Plans
    FJMT Landscape

F  Subdivision and Strata Plan
    Denny Linker and Co

G  Design Excellence Competition Report
    Frasers Broadway Pty Ltd

H  Heritage Impact Statement
    Urbis

I  Consultation Outcomes Report
    Elton Consulting

J  Geotechnical Assessment
    JK Geotechnics

K  Contamination Statement
    JBS&G

L  ESD Report
    Cundall

M  Tables of Compliance
    JBA

N  Traffic and Parking Assessment Report
    Positive Traffic

O  CPTED Report
    Elton Consulting

P  Acoustic Report
    Acoustic Logic

Q  Wind Impact Report
    CPP

R  Reflectivity Report
    CPP

S  Waste Management Plan
    Arup
## Contents

| T | Construction Environmental Management Plan  
  | Frasers Broadway Pty Ltd |
|---|---|
| U | BCA Compliance Statement  
  | City Plan Services |
| V | Access Report  
  | Accessibility Solutions |
| W | Fire Safety Assessment  
  | Defire |
| X | Services Report  
  | Flolah |
| Y | Stormwater Management Plan  
  | Mott MacDonald |
| Z | Director General’s Requirements  
  | Department of Planning and Environment |
| AA | GFA Certificate  
  | Denny Linker & Co |
| BB | Electromagnetic Field Radiation Report  
  | Magshield Products Australia International Pty Ltd |
Executive Summary

Purpose of this Report

This Environmental Impact Statement (EIS) has been prepared for a State Significant Development Application (SSDA) for a mixed use development known as Block 11 at Central Park, Chippendale. This EIS is submitted to the Minister for Planning pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act), and State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD).

Project Description

This EIS will accompany a SSDA for the development of a mixed use building known as Block 11 at Central Park, Chippendale. Central Park is located on the southern edge of the Sydney Central Business District (CBD) (see Figure 1 of this EIS). The Block 11 site is located at the south eastern corner of the Central Park site (see Figure 2 of this EIS).

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

- A part nine (9), part thirteen (13) storey mixed use building comprising a total of 296 residential apartments, residents’ gym and community room, ground floor retail and allocated floor space for a future childcare centre;

- A total of 296 apartments including:
  - 64 x studio apartments
  - 106 x 1 bed apartments
  - 107 x 2 bed apartments
  - 19 x 3 bed apartments

- Total Gross Floor Area (GFA) of 25,521m²;

- Total of 1,413m² non-residential GFA including approximately 607m² allocated for the provision of a childcare centre subject to a further development application;

- External terraces and/or wintergardens to 287 apartments; and

- Three levels of basement comprising car parking, bicycle parking, end-of-journey facilities, storage and services infrastructure.

It is noted that the proposal requires modification to the approved Concept Plan MP06_0171 (as modified). The modification will include amendment to the Concept Plan envelope to reflect the SSD Scheme as well as corresponding amendments to GFA, and public domain.

Planning Context

The proposed development has a total Capital Investment Value (CIV) of over $10 million and is classified as State Significant Development (SSD) pursuant to Clause 2 Schedule 2 of the SEPP SRD.

A request to issue Director General’s Requirements (DGRs) for environmental assessment of the proposed development was made on 22 January 2014. The DGRs were issued to Frasers Property Pty Ltd on 25 February 2014. A copy of the DGRs is provided at Appendix Z.

Section 5.0 of the EIS considers all applicable legislation in detail. The proposal complies with all relevant planning controls.
Environmental Impact

The EIS provides an assessment of the environmental impacts of the project in accordance with the DGRs and sets out the undertakings made by the applicant to manage and minimise potential impacts arising from the development (see Section 5.0). Key environmental assessment considerations identified include, amongst others:

- Compliance with the approved Concept Plan MP 06_0171 (as modified) dated 5 February 2009;
- Height, bulk and scale of the proposed development within the local context and approved Concept Plan (as modified) including solar access;
- Environmental and residential amenity including minimum unit sizes, unit mix, floor to ceiling heights and storage;
- Landscape and public domain management;
- Transport and accessibility including traffic impact, provision for service vehicles and on-site car and bicycle parking;
- Implementation of ESD measures;
- Noise generation during construction and operation; and
- Drainage and flooding including Water Sensitive Urban Design (WSUD).

All identified impacts are addressed in this EIS and are capable of being ameliorated through the implementation of appropriate mitigation measures outlined in Section 6.0. It is noted that this SSDA is consistent with the Concept Plan (as modified), approved on 5 February 2009.

Benefits of the Proposal

Block 11, a mixed use development located at Central Park, Chippendale, will provide a mix of much needed residential accommodation in an area well serviced by public transport, and in close proximity to the retail, work and education opportunities offered by the Sydney CBD and surrounds.

Conclusion

The mitigation measures are detailed in Section 6.0 and have been prepared to inform the ongoing management of the Block 11 site throughout the construction and operational phase of the proposed development. This EIS fulfils the requirements of the EP&A Act and addresses the Director General’s Requirements, demonstrating that the impacts of the proposal can be satisfactorily managed or mitigated. In light of the above, and the benefits of the proposal, we recommend that the proposed development be approved.
Statement of Validity

Development Application Details

Applicant name: Frasers Broadway Pty Ltd
Applicant address: Suite 11, Lumiere Commercial
                   Level 12, 101 Bathurst Street
                   Sydney NSW 2000
Land to be developed: Lot 1 DP1142053 and Lot 1 DP 76719
Proposed development: Development of a mixed use building known as Block 11 at Central Park, Chippendale

Prepared by

Name: Stephen Gouge
Qualifications: BPlan (Hons) MPIA
Address: Level 7, 77 Berry Street, North Sydney, NSW 2060

In respect of

State Significant Development Application for a mixed use development known as Block 11 at Central Park, Chippendale

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: Stephen Gouge
Date: 5/12/2014
1.0 Introduction

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment (DPE) in support of an application for State Significant Development (SSD) for a residential building with ground floor retail and first floor child care centre, known as Block 11, Central Park.

State Environmental Planning Policy (State and Regional Development) 2011 (SEPP SRD) identifies development which is declared to be SSD. Under Clause 2 of Schedule 2 of the SEPP SRD, development on the ‘Broadway (CUB) Site’ (Central Park) with a capital investment value (CIV) of more than $10 million is identified as SSD. Given the development of Block 11 will have a CIV of approximately $103,767,604, the proposal is declared to be SSD for the purposes of the Environmental Planning and Assessment Act 1979 (EP&A Act) (refer to Appendix D).

This EIS has been prepared by JBA on behalf of Frasers Broadway Pty Ltd and is based on the Architectural Drawings provided by FJMT (see Appendix B) and other supporting technical information appended to the report (see Table of Contents).

This report describes the Block 11 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 Requirements of the Director General of the Department for the preparation of the EIS (see Appendix Z). In accordance with Clause 11 of the SEPP SRD, the requirements of Development Control Plans (DCPs) do not apply. However, the relevant DCPs have been considered in the design of the proposed development. 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

The proposal relates to a detailed SSDA for the development of a mixed use building known as Block 11 at Central Park, Chippendale. Central Park is located on the southern edge of the Sydney Central Business District (CBD). The Block 11 site is located at the south western corner of the Central Park site (see Figure 2 of this EIS).

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

- A part nine (9), part thirteen (13) storey mixed use building comprising a total of 296 residential apartments, residents’ gym and community room, ground floor retail and allocated floor space for a future childcare centre;
- A total of 296 apartments including:
  - 64 x studio apartments
  - 106 x 1 bed apartments
  - 107 x 2 bed apartments
  - 19 x 3 bed apartments
- Total Gross Floor Area (GFA) of 25,521m²;
- Total of 1,413m² non-residential GFA including approximately 607m² allocated for the provision of a childcare centre subject to a further development application;
- External terraces and/or loggias to 287 apartments; and
- Three levels of basement comprising car parking, bicycle parking, end-of-journey facilities, storage and services infrastructure.

It is noted that the proposal requires modification to the approved Concept Plan MP06_0171 (as modified). The modification will include amendment to the Concept Plan envelope to reflect the SSD Scheme as well as corresponding amendments to GFA, and public domain.

1.1.1 Objectives of the Development

The objective of the development (in accordance with 7(b) of Schedule 2 of the Environmental Planning Assessment Regulation 2000) is to deliver high quality, well designed building, whilst providing high levels of amenity for new residents and minimising environmental impacts of the development.

1.2 Background to the Development

1.2.1 Concept Plan

MP06_0171 is a Concept Plan approval applying to the Carlton United Breweries (then Frasers Broadway, now Central Park) site which permits the construction of a mixed use precinct comprising:

- 11 development blocks;
- A maximum GFA of 255,500m², of which a minimum of 30% must be commercial floor space;
- Combined basement car parks, providing car parking for Blocks 1, 4 and 8 and Blocks 2, 5, 9 and the Kensington Precinct;
- A new public park;
- Tri-generation and re-cycle water treatment plants;
- Retention of heritage items;
- Public domain works; and
- Contributions.

In July 2008, Frasers Broadway Pty Ltd submitted an application to the Minister proposing the following modifications to the approved Concept Plan:

- Reconfiguration of the development blocks on the site;
- An increase in the amount of public domain on the site;
- Alterations to the building massing across the site;
- A 22,500m² increase in floor space across the site;
- A change in the mix of uses on the site (increase in commercial floor space and decrease in residential floor space);
- Installation of sustainable infrastructure including a tri-generation plant and a black water treatment plant; and
- Combined basements.

The modification application was approved by the Minister in February 2009. Since February 2009 there have been a total of nine (9) modifications and a further modification (Mod 11), pertaining to GFA reallocation and building envelope, will be lodged concurrently with this SSDA with DPE. The
modifications to the approved Concept Plan for the Central Park site are outlined in Table 1.

<table>
<thead>
<tr>
<th>Mod No</th>
<th>Description of Modification</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod 1</td>
<td>Correction of reference error in approval</td>
<td>Approved: 18 July 2007</td>
</tr>
<tr>
<td>Mod 2</td>
<td>Major amendment to Concept Plan (see above)</td>
<td>Approved: 5 February 2009</td>
</tr>
<tr>
<td>Mod 3</td>
<td>Amendment to timing of execution of Voluntary Planning Agreements</td>
<td>Approved: 16 May 2010</td>
</tr>
<tr>
<td>Mod 4</td>
<td>Modification to lapsing clause</td>
<td>Approved: 30 August 2011</td>
</tr>
<tr>
<td>Mod 5</td>
<td>Modification of future assessment requirement B12 ‘ESD and Sustainable Design’</td>
<td>Approved: 31 July 2012</td>
</tr>
<tr>
<td>Mod 6</td>
<td>Modification to GFA within the Kensington Precinct; modification to Block 6 and Block 10 envelopes; and corrections to property references</td>
<td>Approved: 24 July 2012</td>
</tr>
<tr>
<td>Mod 7</td>
<td>Amendment to the allocation of GFA of Block 3 within the Kensington Precinct</td>
<td>Approved: 17 January 2013</td>
</tr>
<tr>
<td>Mod 8</td>
<td>Amendment to the allocation of GFA and the mix of residential and non-residential GFA on the site to enable the redevelopment of Block 4S for student accommodation, and the potential for Block 1 as residential if the approved commercial development proves unviable. Reconfiguration of building envelopes to facilitate the separation of Blocks 1 and 4N from Block 4S, and minor modifications to the envelopes of Blocks 1 and 4N</td>
<td>Approved: 23 December 2013</td>
</tr>
<tr>
<td>Mod 9</td>
<td>Reallocation of GFA to Block 8</td>
<td>Currently under assessment with the DPE</td>
</tr>
<tr>
<td>Mod 10</td>
<td>Amendment to the Concept Plan envelope to reflect the SSD Scheme for Blocks 4 and 4N as well as corresponding amendments to GFA, and public domain.</td>
<td>To be lodged concurrently with Block 4N SSD</td>
</tr>
<tr>
<td>Mod 11</td>
<td>Amendment to the Concept Plan envelope to reflect the Block 11 SSD Scheme as well as corresponding amendments to GFA, and public domain.</td>
<td>To be lodged concurrently with this SSD</td>
</tr>
</tbody>
</table>

### 1.2.2 Other Applications

Other applications relating to the development of the Central Park site, and relevant to Block 11, are outlined in Table 2.

<table>
<thead>
<tr>
<th>Application No</th>
<th>Description of Application</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP07_0120</td>
<td>Demolition and site preparation works to enable development in accordance with the approved Concept Plan</td>
<td>Approved: 12 March 2008</td>
</tr>
<tr>
<td>MP07_0163</td>
<td>Remediation/transitional works including demolition of basements and other structures, stabilisation and protection of heritage buildings, archaeological investigation and remediation of contaminated soil and groundwater</td>
<td>Approved: 15 August 2008</td>
</tr>
<tr>
<td>MP08_0210</td>
<td>Main Park and Stage 1 infrastructure services under Irving and O’Connor Streets, construction of temporary road and public domain services and permanent protection of the Ovoid Drain</td>
<td>Approved: 22 January 2010</td>
</tr>
<tr>
<td>MP09_0164</td>
<td>Stage 2 infrastructure services including power, water, gas, sewer, roads and footpaths and permanent protection of remaining existing services</td>
<td>Approved: 9 November 2010</td>
</tr>
</tbody>
</table>
1.3 Analysis of Alternatives

In the approved Concept Plan (as modified) the identified land uses include residential as well as non-residential development. Block 11 is identified as a mixed use development located at the south eastern corner of the Central Park site. Block 11 will contribute to the residential mix by providing 296 apartments and a total of 1,413m² non-residential GFA in an area well serviced by public transport, and in close proximity to the retail, work and education opportunities offered by the Sydney CBD and surrounds. Chippendale Green is located to the north of Block 11, providing easily accessible public open space.

Given the locational benefits of the site, and Block 11’s consistency with the Concept Plan, pursuant to 7(c) of Schedule 2 of the Environmental Planning and Assessment Regulations 2000, alternatives to the provision of residential accommodation in this location have not been considered.

1.4 Director General’s Requirements

In accordance with section 89G of the EP&A Act, the Director General of the Department issued the requirements for the preparation of the EIS to accompany Block 11, Central Park on 25 February 2014. Following receipt of the DGRs a request to modify the extent of the boundary was made on 23 June 2014. A formal response was received form the Department on 4 August 2014, confirming no change to the DGRs that were issued. A copy of the DGRs is provided at Appendix Z.

The DGRs 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, in particular 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 3 provides a detailed summary of the individual matters listed in the DGRs and identifies where these requirements have been addressed in this report and the accompanying technical studies.

<table>
<thead>
<tr>
<th>General Requirements</th>
<th>Location in Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000.</td>
<td>Pages i, ii, ii, Appendix</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Issues Statutory and Strategic Context</th>
<th>Location in Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including:</td>
<td></td>
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<tr>
<td>EP&amp;A Act 1979</td>
<td>Section 5.2, Appendix</td>
</tr>
<tr>
<td>State Environmental Planning Policy (State &amp; Regional Development) 2011</td>
<td>Section 5.3, Appendix</td>
</tr>
<tr>
<td>State Environmental Planning Policy (Infrastructure) 2007</td>
<td>Section 5.3, Appendix</td>
</tr>
<tr>
<td>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</td>
<td>Section 5.3, Appendix</td>
</tr>
<tr>
<td>State Environmental Planning Policy No.55 – Remediation of Land</td>
<td>Section 5.3, Appendix</td>
</tr>
<tr>
<td>State Environmental Planning Policy No.65 – Design Quality of Residential Flat Development and accompanying Residential Flat Design Code</td>
<td>Section 5.3, Appendix B</td>
</tr>
<tr>
<td>Director General Requirement</td>
<td>Location in Report</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>State Environmental Planning Policy No.64 – Advertising and Signage;</td>
<td>Section 5.3</td>
</tr>
<tr>
<td>Sydney Local Environmental Plan 2005</td>
<td>Section 5.3</td>
</tr>
<tr>
<td>Draft Metropolitan Strategy for Sydney</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Metropolitan Plan for Sydney 2036</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Metropolitan Transport Plan 2010</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Draft Sydney City Sub-Regional Strategy</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Sydney 2030 (The City of Sydney Council)</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Development Near Rail Corridors and Busy Roads - Interim Guideline</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>Guide to Traffic Generating Developments (RTA)</td>
<td>Section 5.2</td>
</tr>
<tr>
<td>NSW Planning Guidelines for Walking and Cycling</td>
<td>Section 5.2</td>
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<tr>
<td>City Centre Access Strategy</td>
<td>Section 5.2</td>
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</table>

**Compliance with the Approved Concept Plan**

The EIS shall demonstrate that the proposal is consistent with the Concept Plan approval MP_06_0171 dated 5 February 2009 (as modified).

**Built Form and Urban Design**

The EIS shall address:
- the height, bulk and scale of the proposed development within the context of the locality and the approved Concept Plan; and
- design quality, with specific consideration of the overall site layout, axis, vistas and connectivity, street activation, façades, massing, setbacks, building articulation, materials, use of appropriate colours, building materials, landscaping and safer by design.

**Environmental and Residential Amenity**

The EIS show compliance with SEPP 65 and the Residential Flat Design Code recommendations to achieve a high level of environmental and residential amenity. In this regard, the EIS should consider the proposed accommodation, as well as surrounding residential development.

**Child Care**

The EIS shall address the relevant child care requirements for construction of a child care centre including the Children (Education and Care Services) Supplementary Provisions Regulation 2012.

**Landscaping and Public Domain Management**

The EIS shall provide details of the public domain works and landscaping adjacent to the site, considering City of Sydney Council's requirements including the Street Tree Master Plan, Streets Design Code and draft Interim Sydney Lights Design Code.

**Transport and Accessibility (Construction and Operation)**

The EIS shall:
- detail access arrangements at all stages of construction;
- detail support of non private vehicle travel methods such as provisions for car sharing schemes;
- detail service vehicle parking arrangements that enable entry and exit in a forward direction;
- provide accurate details of peak hour vehicle movements and assess the impacts of this traffic on the local road network, including intersection capacity;
- include an assessment of the impact upon pedestrian and vehicular traffic with the new link road between O’Connor Street and Park Lane;
- demonstrate appropriate provision, design and location of on-site car and bicycle parking, including bicycle parking at ground level (Note: Planning and Infrastructure supports reduced car parking in areas well-serviced by public transport); and
<table>
<thead>
<tr>
<th>Director General Requirement</th>
<th>Location in Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>• include a Workplace Travel Plan and Travel Access Guide for employees, residents and visitors to the site</td>
<td>Report Appendix L</td>
</tr>
<tr>
<td>Ecologically Sustainable Development (ESD)</td>
<td>Section 5.14 Appendix L</td>
</tr>
<tr>
<td>The EIS shall:</td>
<td></td>
</tr>
<tr>
<td>• detail how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development; and</td>
<td></td>
</tr>
<tr>
<td>• demonstrate that the development has been assessed against a suitably accredited rating scheme to meet industry best practice and achieve a suitable Green Star rating, consistent with the approved Concept Plan (as modified).</td>
<td></td>
</tr>
<tr>
<td>Noise</td>
<td>Section 5.16 Appendix P</td>
</tr>
<tr>
<td>The EIS shall identify the main noise generating sources and activities at all stages of construction, and any noise sources during operation. The EIS shall outline measures to minimise and mitigate the potential noise impacts on surrounding occupiers of land.</td>
<td></td>
</tr>
<tr>
<td>Drainage and Flooding</td>
<td>Section 5.17 Appendix Y</td>
</tr>
<tr>
<td>The EIS shall address drainage / flooding issues associated with the development / site, including stormwater, drainage infrastructure and incorporation of Water Sensitive Urban Design measures.</td>
<td></td>
</tr>
<tr>
<td>Staging</td>
<td>Section 5.20 Appendix</td>
</tr>
<tr>
<td>The EIS is to include details regarding the staging of the proposed development, In relation to the Central Park site.</td>
<td></td>
</tr>
<tr>
<td>Contributions</td>
<td>Section 5.26 Appendix</td>
</tr>
<tr>
<td>The EIS shall address the contributions applicable to the development / or details of any Voluntary Planning Agreement.</td>
<td></td>
</tr>
<tr>
<td>Heritage</td>
<td>Section 5.12 Appendix H</td>
</tr>
<tr>
<td>The EA shall provide a Heritage Impact Statement that should be prepared in accordance with the NSW Heritage Office publication “Statement of Heritage Impact” having regard to the proposal’s impact on the heritage significance of the Castle Connell Hotel. This should also detail any reuse of the building.</td>
<td></td>
</tr>
<tr>
<td>Consultation</td>
<td>Section 4 Appendix I</td>
</tr>
<tr>
<td>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups (including the Chippendale Residents Interest Group) and affected landowners. In particular you must consult with City of Sydney Council. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided</td>
<td></td>
</tr>
</tbody>
</table>
1.1 Project Team

An expert project team has been formed to deliver the project and includes:

- **Proponent**: Frasers Broadway Pty Ltd
- **Development Manager**: Frasers Property Pty Ltd
- **Urban Planning**: JBA
- **Architect**: FJMT
- **Landscape Architects**: FJMT
- **Surveyor**: Degotardi Smith & Partners
- **Strata Surveyor**: Denny Linker
- **Geotechnical Engineer**: JK Geotechnics
- **Contamination**: JBS&G
- **ESD Strategy and Water Management**: Cundall
- **Community Engagement**: Elton Consulting
- **Wind Impact and Reflectivity**: CPP
- **BCA**: City Plan Services
- **Access**: Accessibility Solutions (NSW) Pty Ltd
- **CPTED**: Elton Consulting
- **Electrical, Mechanical and Lift**: Floth
- **Traffic**: Positive Traffic
- **Acoustics**: Acoustic Logic
- **Heritage**: Urbis
- **Civil Engineer**: Mott MacDonald
- **Structure**: Northrop
- **Fire Services and Hydraulics**: S4B
- **Fire Safety Engineer**: Defire
- **Waste Management**: Arup
- **Quantity Surveyor**: Slattery
2.0 Site Analysis

2.1 Site Description

Central Park is located on the southern edge of the Sydney Central Business District (CBD). Central Park is in close proximity to Central Station, Broadway Shopping Centre, the University of Technology, Sydney and the University of Notre Dame Australia. A location plan is provided at Figure 1.

Block 11 is located at the south eastern corner of the Central Park site and is bounded by O’Connor Street to the north, Kensington Street to the east, Wellington Street to the south and Balfour Street Pocket Park to the west. The site is in close proximity to the heritage Brewery Yard Building. An aerial photograph providing the location of Block 11 within the Central Park site is shown at Figure 2.

The Block 11 site occupies an area of approximately 7,820m². The site is currently vacant, with the exception of the existing Castle Connell Hotel, located on the south eastern corner of the site. The site has a legal description of Lot 5 in Deposited Plan 1142053 and Lot 1 in Deposited Plan 76719, owned by Frasers Property Pty Ltd.

![Figure 1 – Location plan](image)

Source: Foster + Partners

2.2 Existing Site

The existing site has been cleared of previous brewery building (with the exception of the southern boundary wall as shown in Figure 3, and is occupied by site offices. Photographs of the site from the east, west and south are provided below in Figure 3 to 5. A Survey Plan of the site is provided at Appendix C.
Figure 2 – Locational context within the Central Park site
Source: Nearmaps and JBA

Figure 3 – Southern boundary of the site adjoining Wellington Street
Source: JBA
2.2.1 Topography and Landscaping

The site’s long axis is oriented east to west, exposing its longest frontage to the north. The site is an island site with a frontage to O’Connor, Wellington, Regent Streets and Balfour Park. The site has a gentle diagonal cross fall of some 3.63m over 168m (1:200) from south east corner to the north-west.

Given the orientation of the site it offers extensive access to direct northern light and excellent ventilation due to site orientation and predominant north east breezes. Panoramic views are also available from almost every level of the development.
2.2.2 Geotechnical Conditions

The site is underlain by the intersection of three stratigraphic units: Hawkesbury Sandstone, Ashfield Shale, and man-made fill over Quaternary sands. The sandstone will provide an excellent foundation of high bearing capacity and the earthquake site factor is favourable as it is a ‘rock’ site. As part of the works, fill / excavation spoil will need to be removed and disposed of in accordance with NSW waste classification legislation.

The water table occurs at relatively shallow depth throughout the site and drainage will be required below the basement floor slab. The soils / groundwater are assessed as being moderately aggressive to buried concrete and mildly aggressive to buried steel structures.

Further detail is provided in the Geotechnical Investigation Report prepared by JK Geotechnics at Appendix J.

2.2.3 Contamination and Remediation

Remediation of the Block 11 site will be completed in accordance with MP07_0163 (Remediation) approved in August 2008 and the approved Remedial Action Plan (JBS 2008 as amended). With the completion of these works, the site will be made suitable for the approved Concept Plan (as modified) uses, including the Block 11 mixed use development proposal.

2.2.4 Heritage

The Block 11 site contains the heritage listed Castle Connell Hotel and archaeological elements, being a tank under the former Building 13 and the Blackwattle Stormwater/ Ovoid Drain. The Castle Connell is a two-storey facebrick Interwar Art Deco Hotel constructed on an important corner site (Wellington, Regent and Kensington Streets) marking the south east extremity of the Central Park site. The refurbishment and/or re-use of the Castle Connell Hotel has not yet been determined in detail and may be subject to further applications and further impact assessment pending detailed design development.

The tank/ cistern beneath Building 13A has been identified as one of the few surviving elements of the early brewery phase and measures approximately 4m x 9m, constructed in brick with a vaulted roof. Overall, the available evidence suggests that the tank is likely to have been constructed in the mid-nineteenth century and is therefore probably related to either the early phase of the brewery or its reconstruction following a substantial fire in 1853.

Within the former CUB site, the Ovoid Drain crosses the southern side of the precinct, running under Irving Street before branching southeast under the Main Park and east across the northern section of Block 11. The stormwater system consists of various types including oviform structure made from brick and timber. It is 1.8m by 1.2m in size and extends from Lake Northam (Victoria Park, Parramatta Road) to Parramatta Road, then down Bay and Wattle Streets.

A Heritage Impact Statement has been prepared by Urbis and is provided at Appendix F.

2.2.5 Infrastructure and Services

Decommissioning of most of the existing infrastructure on the site has been completed in accordance with MP07_0120 (Demolition and Site Preparation) approved in March 2008. However, mains infrastructure, which runs the length of Balfour Street, has been retained in situ following completion of the demolition and site preparation works.
The site has since been serviced with potable water, electricity, sewer, gas and telecommunications, which will be augmented as necessary to accommodate the proposed development.

A Central Thermal Plant (CTP) is provided below the courtyard of the Brewery Yard Building, to the north east of the site. The CTP consists of chiller and boiler plant for the purposes of generating cooling and heating for air conditioning and domestic hot water needs for the whole of Central Park including Block 11. A recycled water plant (including sewer mining) is also provided.

2.2.6 Access

Pedestrian and Cycling

Formalised pedestrian facilities are provided on all road frontages in the vicinity of the Central Park site and include footpaths and ramps. Block 11 will integrate with the proposed Ultimo Pedestrian Network and existing City of Sydney (CoS) Cycleway Network through the CBD and surrounds. A main pedestrian footway and cycle route (proposed City Council Route 20) will run through the middle of Central Park connecting Balfour Street with Broadway and Jones Street in the north. Signalised pedestrian crossing facilities are provided at the intersections surrounding the Central Park site. Central Park incorporates a high number of pedestrian and cycle routes throughout, and within close proximity to Block 11.

Rail and Light Rail

Central Railway Station is located approximately 700m east of the Central Park site. The station offers regular suburban and interstate services on the Sydney rail network.

Central Railway Station also provides light rail services with the Central light rail stop located to the north of the station.

Bus

The Central Park site has excellent access to regular bus services along Broadway, as well as a connecting bus interchange on the corner of George and Lee Streets to the north east of the site.

Vehicle

The Block 11 site is accessible via Kensington Street and O’Connor Street to the northern boundary of the site.

2.3 Surrounding Development

To the North

The site is bound to the north by O’Connor Street, which provides a frontage to the site and adjoining development to the north. To the north of the western portion of the Block 11 site is Chippendale Green (formerly the Main Park) and further to the north, the Brewery Yard. These parks contribute to a generous hierarchy of public open spaces distributed to provide a variety of passive and active recreational opportunities and break up the urban form. Figure 3 shows development to the east.

Also to the north are Block 5A and Block 5C, the recently constructed residential accommodation, The Mark and 5 Park Lane.
To the East

The site is bound to the east by Kensington Street, with a mix of non-residential and residential land uses. Opposite the site is a range of mixed use development, primarily orientated to Regent Street with Kensington Street providing rear service access to these developments.
To the South
The site is bound by Wellington Street to the south. Beyond this is a range of existing industrial, commercial and residential development, 2-4 storeys in height.

Figure 8 – Various photos of building on the southern side of Wellington Street, south of the site
Source: JBA
To the West
To the west of the site is Balfour Park, separating the site from a mix of existing commercial and industrial developments fronting O’Connell Street. Located southwest of the site on the corner of Balfour and Wellington Streets is the White Rabbit Gallery. Existing development and landscaping to the west is shown in Figure 5.

Figure 9 – Land uses to the southern side of O’Connor Street, west of the site
Source: JBA

Figure 10 – Balfour Street Park located west of the subject site
Source: FJMT
3.0 Description of the Development

This section of the report provides a detailed description of the proposed development. A Design Report including Architectural Drawings has been prepared by FJMT and is provided at Appendix B. A Public Domain and Landscape Report including Landscape Drawings has been prepared by FJMT Landscape and is provided at Appendix E.

The proposed development was the subject of a design excellence competition, undertaken in accordance with the approved Concept Plan (as modified) for the Central Park site. FJMT produced the preferred proposal which was selected from a total of six competition entries from three alternate studios. The preferred proposal was endorsed by CoS and DPE. Further details are provided in Section 5.4.

This SSDA seeks approval for the following components:

- A part nine (9), part thirteen (13) storey mixed use building comprising a total of 296 residential apartments, residents’ gym and community room, ground floor retail and allocated floor space for a future childcare centre;
- A total of 296 apartments including:
  - 64 x studio apartments
  - 106 x 1 bed apartments
  - 107 x 2 bed apartments
  - 19 x 3 bed apartments
- Total Gross Floor Area (GFA) of 25,521m²;
- Total of 1,413m² non-residential GFA including approximately 607m² allocated for the provision of a childcare centre subject to a further development application;
- External terraces and/or loggias to 287 apartments; and
- Three levels of basement comprising car parking, bicycle parking, end-of-journey facilities, storage and services infrastructure.

It is noted that the proposal requires modification to the approved Concept Plan MP06_0171 (as modified). The modification is discussed in Section 5.5 and will include amendment to the Concept Plan envelope to reflect the SSD Scheme as well as corresponding amendments to GFA, and public domain.

Photomontages of the proposed development are shown at Figures 11 to 13.
Figure 11 – Perspective of the proposal viewed from the north-east
Source: FJMT

Figure 12 – Perspective of the proposal viewed from O’Connor Street
Source: FJMT
3.1 Design / Urban Design Principles

While adhering to the design principles identified within the approved Concept Plan (as modified), the concept for Block 11 is based on an architectural form which provides a distinct and unique identity that will greatly assist in the branding and value of the development. A detailed description of the design principles is provided in the Architectural Design Report (Appendix B).

The proposed building form has a layered and curvilinear profile, responsive to the varying street and existing building alignments. This form allows for a greater definition of public open space on the ground floor plane, both at the north and south of the site. The form allows for the creation of a south-eastern gateway into the Central Park Precinct, addressing Regent Street and eastern extent of Central Park on Kensington Street.

Notwithstanding the distinctive curvilinear forms at the eastern gateway, the western section of the proposal maintains a linear geometry and alignment to complement the design of the existing building north (the Mark) design and defining the important main park of Central Park.

The following statement has been provided by the project architects FJMT:

“The redevelopment of the Carlton United Brewery site is an important project for Sydney. The Central Park project represents a once-in-a-lifetime opportunity to transform a degraded inner-city area into an high-quality integrated residential and mixed use community of innovation and excellence. Block 11 is a significant component of the wider Central Park precinct, and provides an opportunity to formalise the eastern gateway and address to and from Kensington Street for the development.

Block 11 also has an important role in integrating with the existing Chippendale community and wider urban fabric. We have sought to maximise the benefits and opportunities of this important site and accordingly offered a design solution that more fully achieves the aspiration and objectives for the precinct.

The design proposal for this mixed-use residential building and public open space has emerged from a close and detailed analysis of this important Sydney site, the streetscape, environmental effects and urban form. Our objective has been to create a very high quality 5 Star Green Star building..."
of distinctive architecture character together with a landscaped public open space sequence that forms a new through site public connection.

The building form is composed from three architectural expressions, being an innovative curvilinear form designed with bespoke external sunshade systems provides shade and privacy while giving the architecture of the new building a distinctive and unique character. Whilst honouring the heritage, materiality and texture of its urban context.

Finely detailed lower levels align with the adjacent building scales to create a human relationship with the scale of both O’Connor and Wellington Street, with the tower over set well back from the street alignments on both the north and south boundaries. The lower levels are set well back from the north to create a new, generous and inviting public open space and a sense of invitation to the new through site pedestrian link.

The modest tower form has been carefully proportioned into a slim pair of tapered forms to create an elegant contribution to the skyline of the precinct. Its position and height were developed to minimise environmental effects such as overshadowing on nearby residential and public open spaces and sits very comfortably below the relative heights of the adjacent towers.

Equal care and attention has been paid to the detailing of each element of the architecture including the generous integration of publicly accessible landscaped open spaces on Wellington and O’Connor Streets, which will combine to deliver a high quality development of distinctive architectural character and a new and important community asset.”

3.2 Numerical Overview

The key numerical information of the proposed development is provided in Table 4 below. It is noted that the approved Concept Plan (as modified) is the principle planning instrument applicable to the Central Park site, which includes Block 11. Where it does not provide development controls, Sydney Local Environmental Plan (LEP) 2005 (which continues to apply to the Central Park site), Sydney Development Control Plan (DCP) 2012 have all been referred to.

The total GFA referred to in Table 4 will be the subject of a modification to the approved Concept Plan (as modified) (as described in Section 5.5) and will be lodged concurrently with this SSDA with DPE.

<table>
<thead>
<tr>
<th>Component</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site area</td>
<td>7,820m²</td>
</tr>
<tr>
<td>GFA</td>
<td>25,521m²</td>
</tr>
<tr>
<td>Residential GFA</td>
<td>24,108m²</td>
</tr>
<tr>
<td>Non-residential GFA</td>
<td>1,413 m²</td>
</tr>
<tr>
<td>Levels</td>
<td>Part 9 – Part 13</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>45.60m (RL 64.170)</td>
</tr>
<tr>
<td>Apartments</td>
<td>Total 296 (including 44 adaptable units):</td>
</tr>
<tr>
<td></td>
<td>• 64 x studio apartments</td>
</tr>
<tr>
<td></td>
<td>• 106 x 1 bed apartments</td>
</tr>
<tr>
<td></td>
<td>• 107 x 2 bed apartments</td>
</tr>
<tr>
<td></td>
<td>• 19 x 3 bed apartments</td>
</tr>
<tr>
<td>Car spaces</td>
<td>Total 235</td>
</tr>
<tr>
<td></td>
<td>• Residential - 235</td>
</tr>
</tbody>
</table>
### Component Proposal

<table>
<thead>
<tr>
<th>Component</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery vehicle spaces</td>
<td>2</td>
</tr>
<tr>
<td>Motorbike parking</td>
<td>13 (including 12 residential and 1 retail)</td>
</tr>
<tr>
<td>Bicycle parking</td>
<td>Total: 416</td>
</tr>
<tr>
<td></td>
<td>- Residential: 296 (within storage)</td>
</tr>
<tr>
<td></td>
<td>- Residential visitor: 76</td>
</tr>
<tr>
<td></td>
<td>- Retail - 26</td>
</tr>
<tr>
<td></td>
<td>- Retail visitor – 14</td>
</tr>
<tr>
<td></td>
<td>- Childcare Staff: 2</td>
</tr>
<tr>
<td></td>
<td>- Childcare Visitors: 4</td>
</tr>
<tr>
<td>Landscaped Area</td>
<td>3,635 m²</td>
</tr>
<tr>
<td>(including paving, soft landscaping and courtyards)</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 Demolition and Site Preparation

The existing structures on the Block 11 site have been demolished in accordance with MP 07_0120 (Demolition and Site Preparation) approved in March 2008. Remediation of the site will be completed in accordance with MP07_0163 (Remediation) approved in August 2008. The site will be made suitable for the approved Concept Plan (as modified) uses, including the Block 11 mixed use development proposal.

### 3.4 Infrastructure and Services

Connection to services of potable water, electricity, sewer, gas and telecommunications, will be augmented as necessary to accommodate the proposed development.

A CTP is provided as part of the site wide infrastructure and consists of chiller and boiler plant for the purposes of generating cooling and heating for air conditioning and domestic hot water needs for the whole of Central Park including Block 11.

A Recycled Water Plant (including sewer mining) is also provided to service the non-potable water needs of the whole of Central Park, including Block 11, such as for irrigation to landscaped areas (public domain and private planters), toilet flushing, clothes washing in apartments and general basement cleaning where required.

Further details in relation to the infrastructure requirements and provision at Block 11 are provided in the Electrical Services Infrastructure Report prepared by Floth and provided at Appendix X. All required service inputs (including mechanical, electrical, communications, hydraulics, vertical transport and fire services and safety) have been considered in accordance with the relevant responsible criteria and will be designed in accordance with the relevant standards and authority requirements.

### 3.5 Built Form

#### 3.5.1 Massing and Form

Block 11 is a part nine, part thirteen storey building which is generally consistent with the development controls provided in the approved Concept Plan (as modified) in particular height, sun access plane and GFA. The proposed design presents a variation to the building envelope and building footprint under the
Concept Plan and a modification to this will be lodged concurrently with this application. The massing of the proposal is shown below in Figures 14 and 15.

The design proposal for this mixed-use residential building and public open space has emerged from a close and detailed analysis of this important Sydney site, the streetscape, environmental effects and urban form. The objective has been to create a very high quality five Green Star building of distinctive architectural character together with a landscaped public open space sequence that forms a new through site public connection.

Finely detailed lower levels align with the adjacent building scales to create a human scale to both O’Connor and more importantly Wellington Street, with the tower above set well back from the street alignments on both the north and south boundaries. The lower levels are set back from the north to create new, generous and inviting public open space and a sense of invitation to the new through site pedestrian link.

The tower form has been carefully proportioned into a slim pair of tapered forms to create an elegant contribution to the skyline of the precinct. The tower position and height was developed to minimise environmental effects such as overshadowing on nearby residential or public open spaces and sits very comfortably below the relative heights of the adjacent towers.

An innovative curvilinear form designed with bespoke external sunshade systems provides shade and privacy while giving the architecture of the new building a distinctive and unique character. Whilst honouring the heritage, materiality and texture of its urban context. Equal care and attention has been paid to the detailing of each element of the architecture including the landscaped public open spaces on Wellington and O’Connor Streets.

Figure 14 – Proposed envelope – viewed from the east
Source: FJMT
3.5.2 External Materials and Façade

The proposed façade incorporates material elements of terracotta, metal and glass to provide contemporary reference to the existing masonry buildings of the site, and responds to the new neighbouring developments. The development will complement and provide contrast to the signature glass buildings that address Broadway, and will reinforce the traditional materiality of Chippendale that is appropriate given its interface and proximity to the finer grain of the existing urban fabric.

The design intent is to provide a considered balance of solidity and transparency. Final material choices may be refined with Frasers, with a range of alternate options possible including ceramic panel and polished precast.

A series of facade systems to suit differing solar and privacy requirements are proposed. Additionally, each facade system can be interchanged to suit market and technical demands. The six façade types are presented in the Architectural Design Statement at Appendix B and offer a range of terracotta cladding, aluminium louvres and glazing.

3.5.3 Building Heights

The proposed development is a part nine (9), part thirteen (13) storey building (Figure 17). The main proportion of the building has a height of RL51.57, with the top storey stepped back. The tower portion of the building, located at the eastern boundary, has a proposed height of RL64.17 (Figure 16).

The building height has been primarily determined by the envelope as defined in the approved Concept Plan MP06_0171 (as modified). The building height has also taken into consideration the potential for overshadowing, and impacts to views and vistas. While there are variations to the envelope (as discussed in Section 5.5) the height is generally consistent with the Concept Plan. A section of the proposal, showing the location of uses is also provided in Figure 18.
Figure 16 – Eastern elevation of the proposed building – showing the maximum height
Source: FJMT

Figure 17 – Southern elevation of the proposal showing storey numbers
Source: FJMT + JBA
3.6 Gross Floor Area

The use and GFA for each level within the proposed development is set out in the architectural drawings provided at Appendix B and reproduced in Table 5 below. The total GFA referred to in Table 5 will be the subject of a modification to the approved Concept Plan (as modified) (as described in Section 5.5) and will be lodged concurrently with this SSDA with DPE.

Table 5 – Uses and GFA by level

<table>
<thead>
<tr>
<th>Level</th>
<th>Uses</th>
<th>GFAm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basements Level 3 - 1</td>
<td>Car parking, Servicing, Loading and waste</td>
<td>N/A</td>
</tr>
<tr>
<td>Level G(00)</td>
<td>Residential/childcare and entry lobby / residents' community room / gymnasium, Retail tenancies</td>
<td>1,415, 670</td>
</tr>
<tr>
<td>Level 01</td>
<td>Residential/Childcare</td>
<td>1,831</td>
</tr>
<tr>
<td>Level 02</td>
<td>Residential, Childcare void (above Level 1)</td>
<td>1,887</td>
</tr>
<tr>
<td>Level 03</td>
<td>Residential</td>
<td>2,676</td>
</tr>
<tr>
<td>Level 04</td>
<td>Residential</td>
<td>2,572</td>
</tr>
<tr>
<td>Level 05</td>
<td>Residential</td>
<td>2,572</td>
</tr>
<tr>
<td>Level 06</td>
<td>Residential</td>
<td>2,572</td>
</tr>
<tr>
<td>Level 07</td>
<td>Residential</td>
<td>2,482</td>
</tr>
<tr>
<td>Level 08</td>
<td>Residential</td>
<td>2,310</td>
</tr>
<tr>
<td>Level 09</td>
<td>Residential</td>
<td>1,770</td>
</tr>
<tr>
<td>Level 10</td>
<td>Residential</td>
<td>771</td>
</tr>
<tr>
<td>Level 11</td>
<td>Residential</td>
<td>771</td>
</tr>
<tr>
<td>Level 12</td>
<td>Residential</td>
<td>771</td>
</tr>
<tr>
<td>Level 13</td>
<td>Residential</td>
<td>651</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>25,521</td>
</tr>
</tbody>
</table>
3.7 Apartment Mix and Size

Apartment types are strategically located within the building to take advantage of the varied site amenity. Overall, the apartment mix within the building offers a range of living options and affordability suited to the development’s inner city location. The building comprises a total of 296 apartments distributed as follows:

- 64 x studio apartments (22%)
- 106 x 1 bed apartments (36%)
- 107 x 2 bed apartments (36%)
- 19 x 3 bed apartments (6%)

While the mix does not comply with CoS requirements (refer Table of Compliance in Appendix M), the residential apartment mix responds to the existing and future high demand for one bedroom and studio apartments, in this dense inner city area, and the reduced demand for larger, family-oriented dwellings. It is also noted that while the mix is non-compliant, there is a high level of amenity afforded to each apartment as discussed in Section 5.8, and including apartment sizes that exceed the DCP requirements (see Table 6).

Table 6 – Proposed Internal apartment sizes

<table>
<thead>
<tr>
<th>Apartment</th>
<th>GFA Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio</td>
<td>37-48m²</td>
</tr>
<tr>
<td>1 bedroom</td>
<td>45-61m²</td>
</tr>
<tr>
<td>2 bedroom</td>
<td>80-125m²</td>
</tr>
<tr>
<td>2 bedroom (dual key)</td>
<td>82-112 m²</td>
</tr>
<tr>
<td>3 bedroom</td>
<td>118 - 124m²</td>
</tr>
</tbody>
</table>

3.8 Communal Areas

The proposal provided a mix of internal and external communal areas within the building. The internal areas consisting of the entry lobby and concierge, residents’ community room (85m²) and gym facilities (120m²) at ground level, within the eastern portion of the building (see Figure 20).

Located on the southern elevation of Level 9 is an outdoor communal area. This area will consist of a landscaped terrace and includes a BBQ and spa with large areas of deck (as shown below in Figure 19). Screen planting will be provided to the perimeter for interest and to create a soft edge to the building, whilst providing privacy and buffer to the surrounding private terraces. A change room facility and bathrooms are located internal to the building adjacent to this area.

Figure 19 – Level 9 outdoor communal space
Source: FJMT
3.9 Retail Uses

The proposal comprises retail uses at ground floor fronting the proposed O’Connor Street Park and Kensington Street in the east. Retail uses are also provided on the western aspect at ground floor fronting Balfour Park. As shown on the Architectural Plans at Appendix A, retail uses comprise a total GFA of 1,413m². These uses demonstrate consistency with the approved Concept Plan (as modified), providing active and non-residential uses at ground level.

The location of the various retail tenancies seeks to provide activation across the building (see below in Figure 21). This is discussed in further detail within the architectural design report prepared by FJMT (Appendix B).

The fit out and use of the retail tenancies, including signage, will be subject to a separate Development Application to be determined by CoS Council. It is however noted that indicative signage zones have been included as part of this application (refer to Architectural Plans provided at Appendix A).
3.10 Childcare Centre

A childcare centre is proposed within Block 11 that will provide a maximum of 90 childcare spaces for the precinct, split between those children below the age of 2 years and, children above 2 years of age.

The Childcare is located on level 1 on the eastern side of proposed building. The detailed design of the childcare centre will be the subject of a separate application, however to demonstrate that the proposal is able to comply with the minimum room requirements and other controls an assessment against the Sydney DCP is provided in the Tables of Compliance at Appendix Z.

The location of the centre within the building has been design to have a separate and dedicated entry lobby, loft core and egress paths. Level 1 has also been designed to have high floor to floor heights and generous areas of internal and external space (with the final configurations to be subject to the future requirements of an operator).

Parents using the facility by foot drop off their children via the dedicated entrance lobby on the Kensington Street frontage of the site. Dedicated drop off bay for 3 vehicles is also provided immediately adjacent this frontage, that will allow parents/carers to drop off the children.

The elevated position of the facility prevents the childcare from being overlooked by the other uses within the development or from street level below while also providing views to north, including over Chippendale Green. The location in the building is shown below in Figure 22.

Figure 22 – Location of the Childcare Centre space (shown in red at the eastern end of the building – level 1)
Source: FJMT + JBA
3.11 Landscaping and Public Domain

FJMT have prepared a Landscape Design Report and separate landscape plans that are provided at Appendix B. The proposed landscape works for the site can broadly be defined in the following areas:

- Public Open Space (north) that includes a communal plaza, Kensington plaza and lawn;
- Public Open Space (south) that included a large garden adjoining Wellington Street and pocket plaza adjoining Balfour Park;
- Streetscape and public domain interfaces with Wellington Street to the south Kensington Street to the east and O’Connor Street to the North;
- Communal open space terrace on level 9; and
- Two green roofs on Levels 10 and 14.

The application details proposed landscape character and describes soft and hard landscaping, plant species and material selection. Figure 23 identifies the locations of various landscaping across the site. These are provided in further details below.

![Figure 23 – Areas of landscaping across the site](source: FJMT)

3.11.1 Public Open Space

The proposed design incorporates two substantial areas of public open space; being O’Connor Street Park (2,160m²) and Wellington Street Park (1,170m²). This area represents a 170% increase in landscaped open space as proposed under the Concept Plan (as modified). This adds to the rich network of interrelated green space created within Central Park.

O’Connor Street Park will complement the Chippendale Green and is directly linked with the expanded Wellington Street Park. The park will include soft and hard landscaping elements and retail tenancies of Block 11 will open onto the park. The northern orientation of this space will allow for direct solar access in mid-winter between 8:30am and 1:30pm. Further, the building separation created by the open space will provide increased amenity for users as well as for the neighbouring development of Block 9 and the existing Castle Connell Hotel.
The Wellington Street Park is of considerable importance to mitigating the impact of the Concept Plan (as modified). In expanding the park area by shifting the building mass north, the solar access amenity has been significantly increased across the length of the year for all of Wellington Street. A series of curved native planting and screening walls will provide a transition from the private apartment courtyards to the public open space. Cross section and ground level elevations of a portion of the landscaping are provided below in Figure 24 and 25. Details imagery and explanation of the landscaping proposal is included in the Landscape Design Report (Appendix B).

Figure 24 – Section showing landscaped planters, walkways and sloping turf
Source: FJMT

Figure 25 – Elevation of ground level landscaping showing sloping turf mounds
Source: FJMT

3.11.2 Streetscape and Public Domain

A series of pedestrian pathways interconnecting the open spaces is proposed. These gently curving pathways follow the natural desire-lines of interconnecting O’Conner Street, Park Lane, Wellington and Regent Streets.

Street tree planting and understorey planting along O’Connor Street will provide a green connection of Chippendale Green and Balfour Park with O’Connor Street Park. Screen walls will be used to provide privacy to private courtyards along O’Connor Street with a series of green wall trellises and climbing plants (as shown below in Figure 26).
3.11.3 Green roof

Two non-accessible green roofs are proposed to be located on level 10 and 14 of the proposal. These areas will be planted with low level shrubs and grasses and provided with a gravel perimeter path for maintenance access only.

The planting design seeks to create a visual link between the site’s rooftop geometry and it’s connectivity to the adjacent building forms and the planting on the ground plane.

The ribbon-like bands and swathes of planting characterise the rooftop garden and provide a patterned visual interest when viewed from above form the adjoins residential towers.

3.12 Site Access and Parking

3.12.1 Pedestrian Access and Entry

Pedestrian connections are provided across the site, connecting Block 11 to the broader Central Park development and to the existing Chippendale neighbourhood. Retail tenancies will provide active pedestrian areas at ground floor, fronting O’Connor Street Park and Kensington Street. Outdoor seating in association with the western retail tenancy will provide an activation of the street frontage to Balfour Park. Pedestrian connections are presented in Figure 27.

Resident and visitor access will be provided through secure lobby areas opening to O’Connor Street and O’Connor Street Park. Lift access is provided from basement levels to ground floor lobbies and upper level residential apartment corridors.
3.12.2 Bicycle Access and Parking

The proposed development will provide connection to the existing CoS cycleway network. Proposed connections and cycle links are presented in Figure 27 above. The proposal includes the provision of bicycle parking for a total of 416 bicycles. A breakdown of this is presented in Table 7.

End of journey facilities, including lockers and showers, are provided in association with residential and retail bicycle parking in Basement Level 1.

Table 7 – Bicycle parking provision

<table>
<thead>
<tr>
<th>Use</th>
<th>Number of Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>296</td>
</tr>
<tr>
<td>Retail</td>
<td>26</td>
</tr>
<tr>
<td>Childcare</td>
<td>2</td>
</tr>
<tr>
<td>Visitor</td>
<td>92</td>
</tr>
<tr>
<td>Total</td>
<td>416</td>
</tr>
</tbody>
</table>

3.12.3 Vehicular Access and Parking

Vehicular access is provided from O’Connor Street, forming a cross intersection with Park Lane opposite. Vehicular access will be restricted by a boom gate at the site entrance and roller shutter door at the entrance to the basement car park. A breakdown of car parking allocation by use is set out in Table 8. A total of 44 accessible car spaces will be provided. A further 13 motorcycle spaces are proposed.

Table 8 – Car parking provision

<table>
<thead>
<tr>
<th>Use</th>
<th>Number of Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>235</td>
</tr>
<tr>
<td>Retail</td>
<td>3</td>
</tr>
<tr>
<td>Childcare</td>
<td>4</td>
</tr>
<tr>
<td>Delivery vehicles</td>
<td>2</td>
</tr>
<tr>
<td>Car Share</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>254</td>
</tr>
</tbody>
</table>
3.13 Heritage Works

3.13.1 Castle Connell Hotel

The refurbishment and re-use of the Castle Connell Hotel has not yet been determined and will be the subject of future applications. As part of the design development a Special Element Conservation Plan for the Hotel, to inform the design progression and conserve the significance of the building. It is noted that whilst the Castle Connell has significance, it is not a listed heritage item.

Despite the above, the design of the proposed Block 11 has been respectful of the hotel. The hotel has been incorporated into the larger design in a contemporary style to make a clear distinction between new and existing, incorporating the parapet line to preserve streetscape character and pedestrian scale.

3.13.2 Storage Tank - Landscaping

As shown on the Architectural Plans (Appendix A) a brick tank is located in the north-western corner of the site. This tank has been identified as one of the few surviving element of the early brewery production phase and is considered to be of significant to the site.

As part of the landscaping package, provisions are proposed for an interpretive “viewing lens” element that would allow people to look down into the tank. Lighting and suitable text/information will also be incorporated to illuminate the tank and provide a description of the tank’s former use. A diagram of the intent is provided below in Figure 28.

![Figure 28 - Underground Tank interpretation principles](source: FJMT)
3.14 Ecologically Sustainable Development

The design concept is based on initiatives that are capable of achieving the following industry benchmarks:

- BASIX plus 20% energy and water; and
- 5 Green Star Multi Unit Residential Rating v1.

A 5-Star Green Star rating requires a total of 60 weighted credit points to be achieved in a range of categories. Sufficient weighted credits have been selected to achieve this rating, with additional points identified for further development during the detailed design stage. The Green Star strategy incorporates leading ESD measures such as trigeneration, wastewater recycling and active transport initiatives.

Operable façade screens respond to East West orientation allowing for screens to be deployed in response to solar load while maintaining view. Using high performance glazing with high light transmission allows apartments to achieve NATHERS ratings exceeding 6 Star. The minimum apartment performance is, Htg load 50 MJ/sq.m/yr Clg 41 MJ/sq.m/yr which equals better than 5 stars.

The air-conditioning strategy takes advantage of the district cooling and heating available in the Central Park precinct. Generally fan coil units will be mounted in bulk heads over toilets and kitchens. Fresh air may be ducted to the back of a small number of units while general apartments will use windows. This scheme is proposed as it provides energy efficient systems together with reduced air supply and significant reduction in energy use.

The building is designed with enough flexibility to allow space on the roof for the installation of Photovoltaic panels to offset carbon emissions resulting from the base building operation. Roof mounted photovoltaics will be sufficient to cover between 10-15% of the buildings energy use. The proposed development will connect to the dual reticulation water supply from the Central Park water recycling facility.

3.15 Signage

As part of this application, signage zones have been identified for both building name sign and retail signage. These locations have been shown on the Architectural Plans at Appendix A and are also discussed within the Architectural Design Report (Appendix B). The signage zones generally pertain to the future retail tenancies and childcare centre.

3.16 Subdivision

The proposal seeks consent for the strata subdivision of the site, in accordance with the draft subdivision plans provided at Appendix F.

3.17 Waste Management

Effective environmental and waste management practices will be implemented throughout the demolition, construction and operational stages of development. The following practices will be implemented to reduce the impact of construction works on the environment and local community:

- Environmental management plan;
- Waste management plan;
- Handover and education;
• Commissioning and building tuning; and
• Enhanced metering.

Waste facilities will be located in the basement with compaction and recycling facilities provided. The waste storage area is of sufficient size to accommodate both general waste and recyclable materials for storage and was developed in close consultation with the CoS.

3.18 Building Services

The site is serviced with potable water, electricity, sewer, gas and telecommunications, which will be augmented as necessary to accommodate the proposed development.

A Central Thermal Plant (CTP) is provided as part of the site-wide infrastructure and consists of chiller and boiler plant for the purposes of generating cooling and heating for air conditioning and domestic hot water needs for the whole of Central Park including Block 11.

A Recycled Water Plant (including sewer mining) is also provided to service the non-potable water needs of the whole of Central Park, including Block 11, such as for irrigation to landscaped areas (public domain and private planters), toilet flushing, clothes washing in apartments and general basement cleaning where required.

Further details in relation to the infrastructure requirements and provision at Block 11 are provided in Services Infrastructure Report prepared by Floth Pty Ltd provided at Appendix X.

All required service inputs (including mechanical, electrical, communications, hydraulics, vertical transport and fire services and safety) have been considered in accordance with the relevant responsible criteria and will be designed in accordance with the relevant standards and authority requirements.
4.0 Consultation

4.1 Background

The DGRs for the proposed development require that consultation be undertaken with the relevant local, State or Commonwealth Government authorities, service providers, community groups including the Chippendale Residents Interest Group (CRIG), affected landowners and particularly CoS.

Throughout development of Central Park the proponent’s approach has been to facilitate active partnerships with key stakeholders and the community. For Block 11 this has included targeted briefings with the CRIG and the University of Technology, a community information and feedback session with local community members, as well as ongoing discussions with the CoS and DPE.

A detailed Consultation Report prepared by Elton Consulting is provided at Appendix I.

4.2 Consultation Undertaken

Chippendale Resident Interest Group
The Chippendale Residents Interest Group (CRIG) raised a number of issues regarding Block 11 at their briefing on 30 May 2014, at the community information and feedback session on 31 May 2014, and via email and phone correspondence throughout the period.

While no formal submission was received from the Group, the issues generally fell into the categories of bulk and scale, acoustic impacts, ownership of open space, pedestrian movements, and residential amenity.

University of Technology Sydney
The University of Technology Sydney provided feedback at their meeting on 16 June 2014 about the block and more generally about the Central Park site. The issues generally fell into the categories of student housing, timing of construction and completion of Block 11, childcare places, and heritage and water treatment within the Central Park site.

Community
The community was provided an opportunity to listen to the Block 11 briefing and ask questions at a Community Open Day on 31 May 2014. A number of issues were raised, both as a group following the presentation and one-on-one with project team members outside of the presentation times. The issues generally fell into the categories of mass and design, construction traffic and parking, amenity, and consultation process.

Further opportunity for comment was provided through free form submissions and community feedback form.

Department of Planning and Environment
Prior to lodgement of this SSDA, the proponent, architect and JBA met with DPE to discuss the proposal for Block 11 (and Block 4N) on 14 October 2014. At the meeting the proposed design and intent of the proposal were presented for information.
City of Sydney

A meeting was held with City of Sydney Council staff on 4 June 2014 to walk through the proposed scheme. It is noted that this meeting was prior to the receipt of the DGRs, and prior to Council compiling their comments in response to the request for DGRs.

The meeting was attended by the proponent, JBA, and CoS representatives specialising in planning, and urban design. Council did not make any formal comment on the plans presented at this meeting, however comments were provided in response the plan package submitted as part of the request for DGRs.

A number of other meetings were carried out with technical staff of City of Sydney Council. These have included (but are not limited to)

- Val Debono (Waste Coordinator) - 17 July 2014;
- Col Warne (Traffic);
- Phil Dunne (Public Domain) – 18 August 2014;
- Joseph Gomes (Area Traffic Engineer) – 18 August 2014; and
- Elizabeth Sandoval and Irene Fakas (Childcare) – 22 April 2014.

Authorities

Authorities have been consulted with in relation to: services and infrastructure to ascertain the extent of provision and/or augmentation of services to the site; ESD compliance including BASIX and Green Star; and traffic generation including updated rates for high density residential developments. This, and further consultation, is described in the appended reports.

CRIG and other Groups

A part of the consultation process an individual briefing was offered in the consultation period to the Chippendale Residents Interest Group (CRIG). A specific briefing session for the CRIG was help on 30 May 2014. Representative of the CRIG were also in attendance at the Community Open Day on 31 May 2014. Additionally the CRIG have indicated that they will be submitting feedback on the proposed design, which at the time of preparing this report was still outstanding.

The University of Technology Sydney, and the University of Notre Dame were also information of the consultation process being undertaken.

4.3 Outcomes

A summary of the outcomes/items raised during the consultation described above, as well as the proponent’s response and where these items have been addressed in this report and accompanying consultant reports. The details response table is provided as part of the Consultation Report at Appendix I.
5.0 Environmental Assessment

This section of the report assesses and responds to the environmental impacts of the proposal. It addresses the matters for consideration set out in the DGRs (see Section 1.3).

5.1 Director-General’s Environmental Assessment Requirements

Table 1 in Section 1.3 provides a summary which sets out the individual matters listed in the DGRs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

5.2 Compliance with Relevant Planning Policies

The proposal’s consistency with the relevant strategies, policies and guidelines as set out in the DGRs is addressed in Table 9. Variations to, and non-compliance with, the strategies, policies and guidelines as highlighted in the table are discussed in detail in the following sections of this report.

<table>
<thead>
<tr>
<th>Instrument/Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Plans</strong></td>
<td></td>
</tr>
<tr>
<td>Draft Metropolitan Strategy for Sydney</td>
<td>In considering the strategic context, the Department has reviewed the framework provided by the Draft Metropolitan Strategy for Sydney. The Draft Strategy is intended to guide the development of the Sydney Metropolitan area towards 2031 and beyond and aims to achieve the sustainable growth of Sydney, built around five key outcomes:  • balanced growth;  • a liveable city;  • productivity and prosperity;  • healthy and resilient environment; and  • accessibility and connectivity.  The Draft Strategy’s Balanced Growth objective seeks to strengthen and grow Sydney’s centres by encouraging mixed use within centres including central commercial areas where there is market demand and complementary land uses such as residential. As previously considered and determined by the Department of Planning and the Planning Assessment Commission the proposed residential use meets the identified demand for residential floor space in the context of the sites city edge location.  The proposed development is consistent with the Strategy in that it will:  • encourage patronage on public transport by being in close proximity to rail, light rail, bus and ferry services; and  • encourage alternative modes of travel by providing bicycle parking for residents, visitors and retail patrons.</td>
</tr>
<tr>
<td>Metropolitan Plan for Sydney 2036</td>
<td>The Metropolitan Plan for Sydney 2036 (The Metropolitan Plan) has been prepared to guide Sydney’s growth to 2036 and act as a tool for coordination between Councils and the State government to deliver the action points. One of the central objectives of the plan is to provide improvements to the affordability of housing across Sydney, within the intention to increase the number of smaller (affordable) dwellings. The following actions are relevant to the proposal.  • Action B1.3 – locate 80 percent of new housing within walking catchments of centres with good public transport  • Action D1.1 - locate 70 percent of housing within existing urban areas  The proposed development is consistent with the Strategy in that it will:  • provide a substantial quantum of residential accommodation within walking catchments of centres with good public transport; and</td>
</tr>
</tbody>
</table>
### Instrument/Strategy | Comments
---|---
**Metropolitan Transport Plan 2010** | In March 2010, the Department of Planning announced the first five year review of the Metropolitan Strategy. The resulting Metropolitan Plan for Sydney 2036 seeks to respond to recent challenges facing growth in Sydney including the global financial crisis, housing affordability and climate change.

The review integrated the Metropolitan Strategy with the Metropolitan Transport Plan, while accommodating increased population projections across Sydney, such as:
- a population forecast to reach nearly 6 million by 2036 (an increase of 1.7 million from the 2006 projections);
- a need for 770,000 additional homes by 2036; and
- a need to provide 760,000 more jobs by 2036.

The Concept Plan will capitalise on the site’s accessible location to public transport, retail facilities and employment opportunities, to ensure the proposal supports key actions within the Metropolitan Plan for Sydney 2036, namely:
- A3 contain Sydney’s urban footprint; and
- B1.3 locate new housing within the walking catchments of centres of all sizes with good public transport.

**Draft Sydney City Sub-Regional Plan** | The Sydney Metropolitan Strategy outlines seven key strategies for the development of Sydney over the next 25 years. The strategy sets specific targets for increasing housing and jobs in the major centres of Sydney. Central Park is located within the Sydney City subregion. The Sydney subregion is nominated as a ‘Global Centre’ which is the “main focus for national and international business, professional services, specialised health and education precincts, specialised shops and tourism, it is also a recreational and tourist destination for the Sydney region and has national and international significance”.

The specific targets that are set for the Sydney region are approximately:
- 48,400 new jobs
- 31,793 new dwellings

The proposed development is consistent with the Strategy in that it:
- is located within Central Park which is within the Sydney City sub-region which is nominated as a ‘Global Centre’; and
- will contribute to the achievement of specific targets relating to new jobs and new dwellings.

**Sydney 2030 (The City of Sydney Council)** | The future development of the site supports the objectives of the Sydney 2030 Strategy by promoting the development of a lively and engaging City Centre, supporting a City for pedestrians and cyclists, providing housing for a diverse population, delivering a building that will embody design excellence, and providing for fine grain streets and laneways that enhance pedestrian connectivity.

The proposed development is consistent with the Strategy in that:
- will achieve a 5 star Green Star rating;
- will provide residential accommodation in support of Sydney’s growing economy and population;
- Will provided a large quantum of floor space for employment generation on the site; and
- will provide physical connections through alternative modes of transport and community connections with the overall Central Park development.

**Guide to Traffic Generating Developments (RTA)** | The proposed development will improve walkability and cycle access across the City through the provision of bicycle parking and end-of-journey facilities which facilitate the use of pedestrian and bicycle paths and support a reduced reliance on private vehicles.

**NSW Planning Guidelines for Walking and Cycling** | The proposed development is consistent with the Strategy in that:
- will provide increased density within a site highly accessible to public transport;
- is within walking distance of other services and amenities, including retail and employment opportunities offered by the CBD; and
- is in close proximity to pedestrian and cycle facilities within Central Park as proposed in the approved Concept Plan (as modified).

**Sydney City Access Strategy** | The proposed development is consistent with the Sydney City Access Strategy, encouraging the use of existing and future public transport linages in close proximity to the site, notably the railway network, light rail, and bicycle connections currently under
construction adjacent the site. In addition, the site is well located on an identified bus corridor within a bus stop precinct.

The proposal is consistent with the Strategy, providing accommodation and services in a location highly accessible to existing and planned public transport and commuter linkages. The proposal will not impact on the ability for the Government to deliver the planned infrastructure and service upgrades as part of the Strategy.

Finally, the construction of program of the proposal will be contained within the site, and will not impact the flow of vehicle, pedestrian or cyclist traffic along Broadway.

5.3 Compliance with Environmental Planning Instruments

The proposal’s consistency and compliance with the relevant statutory plans and policies is addressed in Table 10 and further detail is provided below. Variations to, and non-compliance with, the statutory plans and policies as highlighted in the table are discussed in detail in the following sections of this report.

Table 10 – Consistency with relevant environmental planning instruments

<table>
<thead>
<tr>
<th>Instrument/Strategy</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPP (State &amp; Regional Development) 2011</td>
<td>Pursuant to the SEPP a project within the Broadway (CUB) Site will be SSD if it has a capital investment value (CIV) of $10 million or more. 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. This EIS has accordingly been prepared in support of the DA.</td>
</tr>
<tr>
<td>SEPP (Infrastructure) 2007</td>
<td>The proposed development comprises 75 or more dwellings and has access to a classified road / road that connects to a classified road. Accordingly, it is defined as traffic generating development under Schedule 3 of the SEPP and is to be referred to the Roads and Maritime Services (RMS). See Section 5.13</td>
</tr>
<tr>
<td>SEPP 55 (Remediation of Land)</td>
<td>Clause 7 of SEPP 55 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. Remediation works are currently being carried out on the site in accordance with MP 07_0163. Accordingly, the site will suitable for the proposed development at the completion of these works.</td>
</tr>
<tr>
<td>SEPP 64 – Advertising Signage</td>
<td>As shown on the Architectural Plans at Appendix A, the proposal includes indicative signage locations for the future ground floor retail and proposed hotel use. The proposed locations have been included to provide guidance and consistency to signage that will accompany future operators of the tenancies. The locations shown on the plan have considered criteria set out in Schedule 1 of the SEPP. Given the detail of the signage is not sought for approval as part of this application, and will form part of a separate application, a detailed assessment against SEPP 64 and relevant local planning controls will be provided as part of future application for tenancy signage.</td>
</tr>
<tr>
<td>SEPP 65 (Design Quality of Residential Flat Development)</td>
<td>The proposed development has taken into consideration the principles of SEPP 65 and the Residential Flat Design Code. Compliance with the SEPP and the RFDC ‘Rules of Thumb’ is outlined in the Compliance Tables provided at Appendix B and discussed below in Section 5.8</td>
</tr>
<tr>
<td>Guidelines – Rules of thumb draft RFDC Amendment</td>
<td>The proposed development has taken into consideration the principles of draft amendments to the Residential Flat Design Code. An indicative Compliance Table is provided at Appendix Z.</td>
</tr>
<tr>
<td>Sydney Local Environmental Plan 2005</td>
<td>The approved Concept Plan (as modified) is consistent with the relevant controls in the Sydney LEP 2005. Accordingly, Block 11, which is proposed in accordance with the Concept Plan, is consistent with the LEP.</td>
</tr>
<tr>
<td>City of Sydney Development Control Plan 2012</td>
<td>The approved Concept Plan (as modified) is the prevailing document for the development controls applicable to the proposal. However, where the Concept Plan is silent the DCP has been referred to. In particular, compliance with</td>
</tr>
</tbody>
</table>
5.3.1 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 Central Park. As noted in Table 10, 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 11 provides an assessment of the proposed development against the objects of the EP&A Act.

<table>
<thead>
<tr>
<th>Table 11 – Objects of the EP&amp;A Act 1979</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Object</strong></td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>5(a)(ii) To encourage the promotion and co-ordination of the orderly economic use and development of land.</td>
</tr>
<tr>
<td>5(a)(iii) To encourage the protection, provision and co-ordination of communication and utility services.</td>
</tr>
<tr>
<td>5(a)(iv) To encourage the provision of land for public purposes.</td>
</tr>
<tr>
<td>5(a)(v) To encourage the provision and co-ordination of community services and facilities.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>5(a)(vii) To encourage ecologically sustainable development.</td>
</tr>
<tr>
<td>5(a)(viii) To encourage the provision and maintenance of affordable housing.</td>
</tr>
<tr>
<td>Object</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td>5(b) To promote the sharing of the responsibility for environmental planning between different levels of government in the State.</td>
</tr>
<tr>
<td>5(c) To provide increased opportunity for public involvement and participation in environmental planning and assessment.</td>
</tr>
</tbody>
</table>

### 5.4 Design Excellence

#### 5.4.1 Background

In accordance with the approved Concept Plan (MP06_0171) as modified for the former Carlton United Breweries and then Frasers Broadway site, now known as Central Park, the proponent was required to run a design excellence competition for Block 11.

The approved Concept Plan (MP06_0171) as modified required:

- **Schedule 4 – Modified Statement of Commitments**
  - **Item 5 (in part)** – For these blocks three (3) Australian architectural firms will be appointed to each prepare a scheme in accordance with a design brief prepared by the Land Owner. The Land Owner will review the schemes presented and will select the most suitable to be developed as a Project Application for the site.

Subsequently, a Project Application (now SSDA) would be prepared and submitted for approval and the submission would include a report outlining the competition process and submissions. Accordingly, a Design Excellence Competition Report has been prepared and is provided at Appendix G.

#### 5.4.2 Competition

As part of the competition process, a design brief for Block 11 was prepared which included the requirements of the approved Concept Plan (as modified). Three (3) Australian architectural firms were invited to take part in the competition, these being:
- PTW Architects
- Bates Smart
- Francis-Jones Morehen Thorp (FJMT)

Frasers on behalf of the Land Owner, Frasers Broadway Pty. Ltd., prepared a design brief for this building which included the Concept Plan requirements. This brief was submitted to the then Department of Planning and Infrastructure for their information and comment. No comments were received.

The firms were given the briefing documents on 3 May 2013 and submissions were due on 7 June 2013. A judging panel was compiled and included the Hon. Lucy Turnbull, Mr Chris Johnson and Mr Guy Pahor, CEO of Frasers Property Australia and a qualified architect.

Each firm presented their submission to the panel on 28 June 2013. The submissions were also issued to DPE and CoS for their information. City of
Sydney Council staff attended the presentation day. In addition, advice was sought in relation to the structural compatibility and capability, services integration and cost planning.

5.4.3 Outcomes

The competition produced three innovative designs, each unique in their approach to the brief and their response to the immediate surrounds. The preferred proposal was that submitted by FJMT.

The panel considered the Francis-Jones Morehen Thorp (FJMT) non-complying design solution was the stand out in terms of design excellence of the building, most considered design internally and externally and it produced the highest amount of quality public domain space for the benefit of the community. FJMT’s submission demonstrated flexibility in locations of the child care and other commercial uses together the proposed apartment mix.

Further it was considered that the single linear building, with a number of entry points would form a closer community building rather than three distinct buildings. A copy of the Design Excellence Competition Report provided at Appendix G.

5.5 Land Use

The Block 11 site is zoned City Edge under the Sydney Local Environmental Plan 2005. The proposal is consistent with the objectives of the City Edge Zone:

- to encourage an increase in the permanent residential population through new residential development or the conversion of existing buildings and to ensure the maintenance of a range of housing choice;
- to recognise the development potential of certain major sites within the zone and to encourage development of them which is consistent with other zone objectives, and
- to ensure wind levels are consistent with pedestrian comfort and the amenity of the public domain;
- to ensure adequate levels of daylight to streets, and
- to facilitate the conservation of items and areas of heritage significance.

The proposed mixed use/residential building support the objectives of the zone being located in close proximity to services employment and attractions, as well as contributing to employment opportunities, and long term residential housing stock.

The proposed residential uses are highly suited to the dense inner city location and improve the vitality of the area. The amenity of the adjacent Chippendale Green is both protected, and enhanced by locating a mix of uses adjacent to the park, improving overlooking and surveillance.

The proposed development will meet demand, contributing the delivery of identified strategic planning housing targets, and employment generating floor space, preservation and adaptive reuse of important heritage elements on the site, ensure the completion of the northern gateway of the Central Park site in a timely manner, representing a positive outcome for the site, which has otherwise been disused or vacant for the past 10 years.
5.6 Consistency with the Concept Plan

The proposal is generally consistent with the approved Concept Plan (as modified). However, in order to facilitate the propose Block 11 proposal, a concurrent modification will be submitted to the Concept Plan pertaining to building envelope and GFA.

The proposal’s consistency with the approved Concept Plan (as modified), and the proposed modification, is discussed below.

5.6.1 Land Use

The Block 11 site is identified as being residential uses, with non-residential uses located at the lower levels. The proposal is consistent with this aspect of the Concept Plan.

5.6.2 Building Envelope and Height

It is noted that concurrent to this SSDA, a modification to the Concept Plan will be submitted to the DPE (MOD 11), which will seek to revise the Concept Plan envelope to more closely reflect the proposal.

The proposal developed from integrating a layered curvilinear profile response to the varying street and existing building alignments which exist along the boundaries of the site, rather than the traditional rectilinear response within the current concept plan

The proposed form began and developed through a process of analysis of the fundamental components of the Concept Plan being building height, massing and setback with a view to improving, expanding and where possible, optimising the relationship and hence environmental impact of these components.

A series of setbacks, material and fenestration treatments creates a built form that aligns with the height and scale of adjacent buildings, from the two storey scale of the existing hotel, the mid-scale of Wellington Street, the unified definition Chippendale Green and the increased scale to the east.

As can be seen below in Figure 29, the footprint of the building has reduced in its width, with a minor increase in height along the north western boundary. An increase the building height is also proposed at the eastern end of the site, generally consistent with the location of height identified within the concept plan.

Figure 29 – Comparison diagram between concept plan and proposal (Concept Plan shown in red – proposal shown in white)
Source: FJMT
5.6.3 Sun Access Plane and Building Envelope

The sun access plane for the Block 11 site is defined in State Environmental Planning Policy (Major Projects) 2005. The building envelope is shown in the drawings prepared by Foster + Partners as part of the approved Concept Plan (as modified). The drawings show minor incursions on the sun access plane.

The shadow footprint of the proposal is consistent with the principles established in the approved Concept Plan (as modified). The building envelope has been generated by the sun access plane in accordance with the approved Concept Plan (as modified). While the envelope presents a minor variation to the approved envelope, it does so without creating additional overshadowing.

5.6.4 Footprint

The proposal seeks to vary the footprint of the approved concept plan, in conjunction with a concurrent Concept Plan Amendment (MOD 11)

The current concept plan illustrates Block 11 as having a form of three separated building elements. However, as part of the competition process, FJMT explore the available benefits of altering the footprint to achieve a better urban design and amenity outcome, with particular regard to the treatment of the ground plane.

Accordingly, FJMT have proposed a curvilinear building form, maximising the public open space offering on the site, with overall gains in environmental amenity for surrounding land uses.

5.6.5 GFA

The proposal the subject of this application seeks approval of a maximum GFA of 25,521m² with a maximum residential GFA of 24,108m². The proposal is generally consistent with the current concept plan allocation, being less than the maximum permissible (25,525m²). The proposed variation is primarily due to design development on this block and other Central Park Blocks.

Accordingly, modification of the approved Concept Plan (as modified) is required. A modification to increase the maximum GFA and modify the percentage of residential vs non-residential GFA will be lodged concurrently with this SSDA with DPE.

5.6.6 Land Use Mix Across the Site

Consistent with the requirements of the Concept Plan, as a result of the proposed development, the overall Concept Plan will maintain the land use split of 23% non-residential (minimum) and 77% residential (maximum). The detail of the proposed GFA as a result of this proposal and other modification across the site are addressed in the concurrent Concept Plan modification submitted to the DPE.

5.6.7 Design Integrity Panel Recommendations

Recommendations of the CUB/Frasers Design Integrity Panel as they relate to Block 11 were considered as part of the design and formation of the proposed scheme, despite there being a variation to the current concept plan scheme.

5.6.8 Public Art

The public art strategy endorsed under the approved Concept Plan (as modified) requires the provision of numerous artworks and installations across the Central Park site.
The recently revised Public Art Plan (Review 6 - dated 23 June 2014) has been prepared by Barbara Flynn. This strategy covers the following:

- Themes of the artworks;
- Permanent and temporary artworks;
- Digital art;
- Heritage interpretation; and
- Budgets and implementation strategies.

The proposal is subject to detailed design and it is recommended that a condition of consent be imposed requiring that design of the public art proposal is to be developed in consultation with CoS and DPE and that the art be approved prior to the issue of the final Occupation Certificate.

5.6.9 Landscaping

A Public Domain and Landscape Report including Landscape Drawings has been prepared by FJMT and is provided at Appendix E.

The report identifies the key strategies of the public domain and landscaping proposal as being: connectivity, access, street character, street planting, planting and materials.

The strategies adopt CoS requirements as defined by the DCP and expressed during the consultation meetings described in Section 4. In particular:

- The landscape upgrade within the site is predominately a streetscape upgrade to meet the City of Sydney public domain paving design policy. The public domain precast paving 400mm x 600mm is proposed to be extended to the site boundary.
- Street trees are proposed to Wellington Street planted in mass planter beds to city of Sydney standard detail.
- The parking bays consist of cobble stone inlays and kerbing to match City of Sydney standard detail.
- A portion of land 3m wide along the sites southern boundary (Wellington Street) that will be dedicated to Council as part of the existing VPA with Council.

The proposed modification to the concept plan envelope and footprint has allowed for a significant improvement in the public domain and landscape offering on the site. As shown below in Figure 30, the northern and southern landscaped areas have been increased substantially.

The proposal will provide 170% of the current concept plan (as modified) landscaping area to the northern open space (from 1,270m² to 2,160m²) and 175% of the concept plan for the southern open space (from 670m² to 1,170m²). As shown in Figure 30 below, this provides a significant ground plan/public domain improvement to the site. The proposal also includes green roofs on level 9 and 14 as part of the design.
Overall, the public domain and landscaping proposal was well received by CoS during the numerous consultation meetings, and the final proposal as illustrated in Appendix A and E responds to the issues raised.

5.7 Built Form and Urban Design

The proposed building form is integrated into a layered curvilinear profile responsive to the varying street and existing building alignments. Design of the proposal was largely driven by the key planning constraints of the Concept Plan particularly height, sun access plane and envelope, footprint and GFA discussed below and in detail within the Architectural Design Report at Appendix B.

The external materials, colour and facade articulation (detailed in the Design Report proved at Appendix B) have been designed to complement the character of the surrounding buildings. The use of varying and innovative façade systems provides shade and privacy while giving the architecture of the building a distinctive and unique character.

Overall, Block 11 will substantially improve the appearance of the existing vacant and disused site, providing a positive contribution to the southern end of Central Park and Chippendale. The proposal delivers a high-quality building of distinctive architectural character together with a landscaped public open space sequence that forms a carefully scaled and inviting pedestrian network.

5.8 Environmental and Residential Amenity

The proposed development has been designed in accordance with the principles of SEPP 65 and the Residential Flat Design Code (RFDC). The proposed development meets the objectives of the SEPP and complies with the RFDC ‘Rules of Thumb’ as outlined in the Compliance Tables provided at Appendix B and detailed below. A Design Verification Statement in accordance with the SEPP is also provided at Appendix B.

Design Quality

A SEPP 65 Statement addressing the ten design quality principles of the SEPP has been prepared as part of the Design Report provided at Appendix B. The statement also assesses the Residential Flat Design Code ‘Rules of Thumb’. The proposed development has been designed in accordance with the principles and
‘Rules of Thumb’ to provide a high quality development, affording high levels of amenity to residents.

Building Separation

The proposal provides separation from surrounding building consistent with the objectives and intent of the RFDC. The proposed curvilinear massing has also allowed for increased separation distances to the existing buildings to the north.

Communal and Open Space

The proposal provided a mix of internal and external communal areas within the building in accordance with the intent of the RFDC. The internal areas consist of the entry lobby and concierge, residents’ community room and gym facilities at ground level, within the eastern portion of the building. The external area located on level 9 provides significant amenity for the residents providing BBQ facilities, seating and spa.

In addition to the above, the proposal incorporates over 3300 m² of landscaped area as public open space being the O’Connor Street Park (2,160 m²) and Wellington Street Park (1,170 m²).

Private Open Space

The majority of apartments within the development are provided with an area of private open space, as either a balcony or wintergarden that can be enclosed. All private open spaces achieve a minimum depth of 2m to allow high level of functionality of the space and accord with the requirements of the RFDC.

Storage

The proposed development provides internal storage to each apartment and in the basement, in accordance with the RFDC and SEPP 65. A detailed storage schedule for the proposal is provided as part of the Architectural Design Report (Appendix B).

Unit Sizes

As demonstrated on the Architectural Plans and within the Architectural Design Report, the proposal provides units sizes that predominantly meet or exceed the requirements of SEPP 65/RFDC.

All apartments comply with the maximum depth of 8m from window opening to the back of the kitchen, as well as ensuring all cross through apartments exceed 8m in depth.

Solar Access

Assessment of the proposed development against SEPP 65/RFDC has been undertaken by FJMT as part of the Architectural Design Report (Appendix B). The RFDC establishes the following:

“Living rooms and private open spaces for at least 70 percent of apartments in a development should receive a minimum of three hours direct sunlight between 9 am and 3 pm in mid-winter. In dense urban areas a minimum of two hours may be acceptable”

For a consistent comparison of the solar access achieved by the proposed development (compared to other buildings on the Central Park Site), the same methodology that was adopted during the preparation of the Concept Plan (as amended) prepared by COX/ATA has been used. This study identified parameters for solar access being: 2 hours of solar access should be provided to apartments between the hours of 7:30am and 4:30pm on 21 June (mid-winter)
By curving the building form away from south and away Block 5C also allows for a substantial improvement in daylight access to these apartments, as well as an improved separation distance between these two buildings. The curvilinear form of the proposal allows for north facing apartment to be optimised, providing significantly increased sun access into both the apartments and public open space.

The number of apartment achieving SEPP 65 compliant solar access (2 hours between 9am and 3pm on June 21) is 73% (217 of 296 apartments), which increases to 83.5% (258 of 296 apartments) in March.

It is noted that the number of south facing apartments is 19%. As detailed in the Architectural Design Report, it is however noted that the amenity of outlook over Chippendale, given its lower scale, is excellent as is the quieter orientation to Wellington St and connection with the new Wellington Street park to be created.

Natural Ventilation

The RFDC uses ‘cross-ventilation’ as a convenient way of checking the likely contribution of natural ventilation to projected comfort conditions. Cross ventilation describes where a dwelling has operable openings to two or more distinctly different orientations, making it likely that in any conditions of breeze, the relative pressure differentials will result in some air movement through the dwelling. The Rules of Thumb in the RFDC give a quantified recommendation with respect only to cross ventilation, relating to the overall proportion of complying apartments.

All apartments within Block 11 are naturally ventilated, with 45% of apartments being naturally cross ventilated, and a further 24% having hybrid natural cross ventilation system which creates a managed two-way cross ventilation path connecting vertical fresh air shafts to the apartments. A detailed analysis of ventilation is provided within the Architectural Design Report (Appendix B).

An excerpt of this analysis is provided below in Figure 31.

The proposal provides a balance of dual-orientated and flow-through apartments with single orientated configurations. An innovative approach to common area ventilation assists in achieving cross-ventilation for apartments with a single orientation, whilst providing added amenity and view to circulation spaces and corridors. Such an approach also has the benefit of minimising reliance on active ventilation systems, reducing the ongoing operational cost.
The facade has been appropriately considered incorporating extended articulation with elements such as fins to capture breezes to facilitate natural ventilation and shield against undesirable weather.

5.9 Overshadowing and Solar Access

Shadow Diagrams have been prepared by FJMT and are provided at Appendix B. The building envelope of Block 11 is in keeping with the principles of the approved Concept Plan (as modified) and maintains net overshadowing with marginal variations. The variations are limited to shadows cast on roofs, roads, rear elevations and in the case of building frontages are limited to incremental time frame increases. Shadow analysis and impacts are described below.

The heights and alignments of the proposal have been carefully determined to provide improvements to the amenity of the public domain and adjacent building amenity by enhancing solar access into the public space, whilst seeking to minimise any additional overshadowing impacts to adjacent building, particularly those located south of the site.

When developing the proposed scheme, FJMT reviewed a comparison between the proposal and the Concept Plan using 3D modelling. This study, combined with shadow analysis has refined the ‘proposed scheme’ such that the additional areas of shadow do not fall on key portions of the Block 11 site and neighbouring properties.

The proposed scheme has opened the southern edge of the site to greater solar access so much so that the Wellington St edge of the site will achieve 21.2% more solar access than the Modified Concept Plan envelope.

5.9.1 Impact to Wellington Street

The shadow diagrams prepared by FJMT have considered the impact of the proposal on the residential dwelling and non-residential uses south of site on Wellington Street. Diagrams have also been prepared which provide a comparison between the overshadowing impact from the current concept plan and proposed envelope (noting the variations to the existing concept plan). In summary the proposal:

- The building mass has been shifted north, further away from Wellington Street
- Given the removal of the ‘slots’ which exist in the current concept plan envelop, overshadowing will occur at midday in mid-winter.
- Whilst the building height has been increased, as shown below in Figure 32, due to the separation distance and angle of the sun, increased levels of solar access are achieved to Wellington Street.
- Due to the orientation of the site and Wellington Street buildings, there is no change to the shadow impact between the existing concept plan and proposal.
- Minor addition overshadowing will occur in the early morning (9am in mid-winter) to the rooftops of Wellington and Queen Street buildings.
Given the proposed scheme recommends that the gap between the two western buildings as present in the Modified Concept Plan be closed there is also an additional section of shadow cast at noon by this portion of the building.

Overall, the shadow diagrams, which illustrate the shadows cast by existing surrounding buildings and the proposed development on 21 June (worst case), show that while there will be some minor additional areas of overshadowing, the shadows generally fall upon the roof of primarily non-residential buildings south of the site.

5.10 Wind

A Wind Report has been prepared by Cermak Peterka Petersen (CPP) and is provided at Appendix Q. The report refers to the assessment undertaken for the original Concept Plan in which a physical model was produced for the purposes of wind tunnel analysis. A model of the One Central Park Block 11 development including replicas of surrounding buildings within a 570 m radius was constructed to a 1:400 scale and placed on a turntable in the wind tunnel.

The assessment found that all locations around the building are acceptable for pedestrian walking activities from a comfort perspective, including the outdoor areas of the childcare centre and areas of outdoor fining associated with the retail tenancies.
5.11 Reflectivity

A Reflectivity Report has been prepared by Cermak Peterka Petersen (CPP) and is provided at Appendix R. The report refers to the assessment undertaken for the original Central Park concept plan massing geometry, and considers the amendments to Block 11 as part of this proposal.

CPP have considered the proposed design against the concept plan (previous study) and have noted that whilst there are no reflectivity issues for internal streets present, late afternoon sun in midseasonal months has the potential to reflect from the building southern elevation on Regent Street. However, given the articulated nature of the façade and the various materials used, this is considered to temper any reflectivity. Additionally, the proposal addition of shadowing devices (as shown on the architectural plans at Appendix A) will significantly reduce the potential for specular reflections.

The reflectivity report also considered that the proposed materials and articulation will have a reflectivity coefficient of 20% or less. Accordingly, the proposal will meet the DCP requirements in relation to reflectivity.

5.12 Childcare Requirements

The proposal allows for space on level 1 cater for a future childcare Centre, in accordance with the requirements of the Central Park Concept plan.

Whilst a separate approval will be required for the detailed fitout and use of the space as a childcare centre, as part of this application the provisions of the Sydney DCP 2012 and Children (Education and Care Services) Supplementary Provisions Regulation 2012 have been considered, including alliance of services and space to meet the facilities and equipment, staff and child number requirements. A preliminary compliance table again the childcare provisions of Sydney DCP 2012 are provided at Appendix M. The balance of spaces on the Central Park Site are being provided within Block 4N.

5.12.1 Electromagnetic Field

As required by the Sydney DCP 2012, assessment of the level of radio frequency electromagnetic field within the area allocated for the childcare centre has been carried out by Magshield Products Australia (Pty Ltd) (Appendix BB).

The report concludes that in all locations within the proposed childcare area, the measured radio frequency was well below the permissible limit for occupational and general exposure. It is recommended that during construction of the Childcare Centre, all walls, including the internal stud walls should be internally lined with aluminium foil to assist in shielding.

5.13 Heritage

In accordance with the relevant DGRs a Heritage Impact Statement has been prepared by Urbis and is provided at Appendix H. The HIS considered the proposed development impact the significance and ongoing value of the existing Castle Connell Hotel. The HIS also includes an assessment against the established Conservations Policies on the site as part of the Concept Plan, and ‘Statement of Heritage Impact Guidelines’

It is noted that the Proposal excludes works to the Castle Connell hotel. The HIS has assessed the impacts of the new proposal directly adjoin the hotel. Whilst it is noted that the hotel is not a heritage item, a separate Special Element Conservation Plan will be prepared, to inform design development and future applications for the fit-out an use of the Hotel.
The following aspects of the proposal have been considered in the HIS, particularly with regard to the variation to the current Concept Plan:

- The building footprint has been carefully designed to respond to the archaeology on the site, the ovoid drain and tank located to the north east corner. A ‘zone of sensitivity’ extending 1.5 metres from the centre of the drain and 1.5m around the tank was established and setbacks from the items have been more than maintained in the subject proposal.

- The modification of the bulk at the top of the building has been carefully considered to ensure no increase in overshadowing of the neighbouring Chippendale Conservation Area to the south from the previously approved proposal, with the main bulk area retained to the far east of the site.

- The façade treatment is contemporary in design and materiality responding to the hotel and conservation area appropriately in scale and articulation, whilst the rooftop of the proposed is a green landscaped flat roof.

- Site specific interpretation is designed within the proposal for the underground tank that is located within the public park open space to the north east including a viewing portal and will be incorporated into the greater interpretation strategy for the whole site.

5.14 Transport and Accessibility

A Traffic and Transport Report has been prepared by Positive Traffic and is provided at Appendix N.

5.14.1 Traffic Generation

Traffic impacts for the whole of the site were assessed and deemed satisfactory as part of the approved Concept Plan (as modified). The assessment estimated that the development would generate some 550 vehicle trips per hour (vph) and that the access intersections serving the site would have a good level of service with additional spare capacity.

As part of previous applications on the site (namely Block 8, 1 and 4N) consideration of the increased traffic as a result in alterations to the land use. Table 12 below identifies the recent amendments to the proposed traffic generation across the site (as detailed within the Traffic and Parking Report at Appendix N).

<table>
<thead>
<tr>
<th>Location</th>
<th>Traffic Change (vph)</th>
<th>Overall Generation (vph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Concept Plan</td>
<td>-</td>
<td>493</td>
</tr>
<tr>
<td>Block 2 and 5</td>
<td>+39</td>
<td>532</td>
</tr>
<tr>
<td>Block 2 and 5 – mix modification</td>
<td>+3</td>
<td>535</td>
</tr>
<tr>
<td>Kensington Street modifications</td>
<td>+5</td>
<td>540</td>
</tr>
<tr>
<td>Block 8 SSD</td>
<td>+5</td>
<td>545</td>
</tr>
<tr>
<td>Block 1 SSD</td>
<td>+33</td>
<td>578</td>
</tr>
<tr>
<td>Block 4N SSD</td>
<td>+14</td>
<td>592</td>
</tr>
</tbody>
</table>

In response to the relevant DGRs, for the residential component, the assumed traffic generation of previous traffic reports (an accepted by relevant authorities) were as follows:

- 0.20 peak hour trips for studio and one bedroom units, and
- 0.24 peak hour trips for two and three bedroom units.
Therefore the residential component is anticipated to generate a total of 64 peak hour trips two-way.

The traffic generation from the retail component of the proposal is considered to be negligible, given it will mainly support the immediate population. The same approach has been adopted in the Traffic and Parking Report for childcare, given it is intended to predominantly service local residents.

In the previous reports for the site (based on the current GFA and land use mix) it was found all intersections surrounding the site would continue to operate at a satisfactory level of service with an overall site traffic generation of 592vph. Given the proposed GFA and land use mix as part of this application the Traffic and Parking Report considers the total generation and performance on intersections satisfactory.

Of further note is the proposal restricts any vehicular connection to Wellington Street (which is indicated in the current Concept Plan) and thus all traffic generated by both the proposal and the Central Park development as a whole would not impact upon existing residents of Wellington Street.

5.14.2 Vehicle Parking and Access

As set out in the Traffic and Parking Report (Appendix N) the proposed parking provision (total 296 spaces) is consistent with the maximum permissible established under the Sydney LEP 205 and DCP 2012. For non-residential land uses, the proposal is also consistent with the relevant provisions of the Sydney DCP 2012.

The provision is also in accordance with the approved Concept Plan (as modified) which stipulates a minimum parking provision for the entire site of either the LEP requirements or 2,000 spaces.

Vehicle Access to the site is provided via an entry / exit driveway access from O’Connor Street. Access is then provided on the site via two way ramp to the basement levels. The configuration and layout of the proposed access driveway was discussed Sydney City Council who confirmed the arrangements were satisfactory in principle. The proposal arrangement also allows for Council Garbage vehicle to access the site and basement (refer to swept paths included as part of Appendix N).

The three basement levels are configured as split level accessed via a ramp at either end. The car park and associated elements have been designed in accordance with the relevant Australian Standards while providing sufficient car parking spaces to satisfy the requirements of the LEP.

On-street parking is proposed on the western side of Kensington Street immediately south of O’Connor Street (vehicle drop off). A total of three (3) spaces would be provided in this location. The purpose of these spaces is to provide both drop off / pick up spaces for the child care centre and visitor parking for the retail component if required.

Internal Access

The car park and associated elements such as space dimensions, circulation aisles, ramp to be designed in accordance with the relevant Australian Standard for car parking facilities, namely AS2890.1: 2004 and AS2890.6:2009.
5.14.3 Bicycle Parking and Access

The proposal provides a total of 416 spaces for bicycle parking distributed throughout basement levels 1–3 and ground floor in accordance with the DCP2012 requirements. The provision includes 74 bicycle parking spaces for residential visitors which will be provided in a dedicated room located on ground level. The ground floor bicycle parking area has been designed so as not to be enclosed, and therefore has not been included in the calculation of GFA.

Retail bicycle parking is also provided, including 26 spaces and 26 lockers (along with end of journey facilities) located in basement B1, including 14 retail visitor spaces. 4 childcare staff bicycle spaces and 2 childcare visitor spaces will also be provided, consistent with the provisions of the DCP 2012 (based on a total staff of 19).

Access to bicycle parking is available from the main building entrance (specific retail entry and lift), the access door to the ground floor storage room, or vehicle ramp.

5.14.4 Loading and Deliveries

Loading and deliveries will take place on the site from Basement Level B1 or the drop off bays located on Kensington Street. A dedicated area has been provided at the eastern end of Basement Level 1 to allow trucks to stop outside of the line of traffic, to ensure vehicle entry and exist can continue to operate.

Adequate vehicle crossings to cater for the required service, delivery and waste collection vehicles are provided in accordance with the relevant Australian Standard. Vehicles will enter in a forward direction with suitable manoeuvring spaces provided within the basement (refer to Appendix N).

The loading dock proposal has been discussed with the relevant Council officers as part of the consultation process described in Section 4.0.

Waste collection will be conducted from within the basement in accordance with the Waste Management Statement provided at Appendix S and described in Section 5.18.

5.14.5 Alternative Modes of Transport

Public Transport

The site has excellent access to public transport, being well served by regular bus services along Broadway, as well as a connecting bus interchange on the corner of George and Lee Streets to the north east of the site. Central Railway Station is located approximately 500m north-east of the site and offers regular suburban and interstate services on the Sydney rail network. The station also provides light rail services with the Central light rail stop located to the north of the station.

While it is expected that residents, visitors and retail staff would make use of the existing available public transport services, given the type and frequency of services, it is not expected that further augmentation would be required. Further, any improvement to the services would be a matter for consideration by Transport for NSW as part of its long term strategic planning and implementation process.

Walking and Cycling

The site is very well situated in terms of provision for walking and cycling with a number of strategic and local cycling routes and links in the vicinity of the site. Public footpaths are currently provided along the majority of roads in the local
network which continues into the residential streets to the south and west of the site as well as across Broadway into the area north of the site.

There is an existing on-road cycle path which, along Broadway, is provided as an off-road shared pedestrian / cycle path. A combination of other on- and off-road cycle links provide access to the surrounding suburbs. In addition, on-road cycling is also permissible on the local road network where traffic volumes are generally considered to be moderate.

The provision of bicycle facilities throughout the site accounts for the external linkages to existing and proposed bicycle routes as part of CoS Bicycle Plan. Recreational cyclists will utilise the shared links to access Central Park Avenue before making their way to Broadway and non-recreational cyclists will utilise the sign posted cycle route through the site.

The result will be a permeable pedestrian / cycle network through the Central Park site which will be fully accessible to locals and those traversing the site, and will enhance existing pedestrian / cycle accessibility between Chippendale and the public transport node represented by Central Station.

Car Share
In accordance with the approved Concept Plan (as modified) and the DCP, 10 share spaces. Users of the car share scheme may or may not be residents of Block 11.

Green Travel Plan/Workplace Travel Plan
A Green Travel Plan (GTP)/Workplace Travel Plan is a package of measures aimed at promoting sustainable travel and reducing reliance on private vehicles, to ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible.

The GTP might include:
- Compliance with stringent parking controls applicable to the site;
- Creation of street networks and cycle ways, footpaths and links to encourage cycling and walking;
- A Travel Access Guide provided to each new occupant detailing public transport access to the site, and providing frequency of services and maps;
- Public transport information boards making residents and visitors more aware of the available alternative transport options;
- Provision of free weekly / quarterly public transport tickets (at initial occupation) to encourage public transport use from day one;
- Provision of high quality telecommunication points providing residents with the opportunity to work from home, reducing the need to travel;
- Provision of resident and visitor bicycle parking;
- Provision of a newsletter for up to two years after occupation bringing the latest news on sustainable travel initiatives in the area, and
- Provision of half yearly membership to a car share scheme.
5.14.6 Construction Traffic

The traffic arrangements associated with constructing Block 11 would be subject to a Construction Traffic Management Plan prepared by a suitably RMS qualified transport planner / traffic engineer. This report would be prepared at the time of preparing the Construction Certificate (CC) application once construction methods and approach for the development have been finalised.

5.15 Ecologically Sustainable Development

As detailed in this EIS, the residential/mixed use development is designed in accordance with the principles of ecologically sustainable development as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000. The proposed development:

- Does not pose threats of serious or irreversible environmental damage, and measures to prevent environmental degradation will be implemented throughout construction as per the ‘Precautionary Principle’;
- Ensures that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations by creating a vibrant mixed use environment, maximising the facilities of a well-resourced asset, and ensuring no damage to the environment during construction and operation, as per the ‘Intergenerational Principle’;
- Has considered the conservation of biological diversity and ecological integrity in its design as per the ‘Biodiversity Principle’; and
- Is designed to be energy and water efficient to reduce lifetime environmental impacts and running costs as per the ‘Valuation Principle’.

5.15.1 ESD Measures

An Ecologically Sustainable Design (ESD) Report has been prepared by Cundall and is provided at Appendix L. In accordance with the commitments made as part of the approved Concept Plan (as modified), the proposed development aims to meet appropriate environmental benchmark standards for multi-residential developments, and has been designed to demonstrate consistency with industry best practice, specifically to achieve a 5 star Green Star rating. The proposed development is part of the Central Park site which incorporates a precinct and centralised plant approach thereby improving the efficiency and environmental performance of the proposal.

The proposed development is part of the Central Park site which incorporates a precinct and centralised plant approach thereby improving the efficiency and environmental performance of the proposal.

The project will be assessed using the Green Star Multi-Unit Residential tool (MURT) to provide a holistic sustainable design (in accordance with the Central Park Concept Plan) while achieving compliance with standards required of the Building Codes of Australia. In addition to the environmental initiatives adopted for the project, the following minimum regulatory requirements apply to the project;

- BCA Section J1 and J2;
- NSW BCA Section J(A) - BASIX Energy, Water and Thermal Comfort.

The project will exceed BASIX minimum requirements to deliver the targets set in the planning conditions for savings in greenhouse gas emissions and potable water consumption.
5.15.2 BASIX and BCA Compliance

BASIX sets sustainability targets for water and energy as well as minimum performance levels for the thermal comfort of the building. The proposed development will target a minimum 40% in energy improvement compared to the 20% required by BASIX. Likewise, the proposal will target a 60% water saving, compared to the minimum 40% required by BASIX.

The following items are to be implemented to reach the energy reduction target:

- Energy efficiency fixtures (taps, toilets etc) and appliances
- High performance building fabric which includes the adoption appropriate double glazing and façade treatment to all elevations;
- Detailing and specification of appropriate insulation to all exposed floors, roofs and external walls;
- Use of efficient lighting fixtures to apartments and common areas. Typically apartment lighting will be limited to LED and fluorescent fittings only. Common plant areas will be fluorescent fittings only, and metal halide fittings will be limited to car park entry points only. All common residential areas will be either LED or fluorescent fittings only;
- Lighting operation to common areas will be fitted with time-clock controls, motion sensors or timer settings to improve energy efficiency;
- Basement car park ventilation systems will include carbon monoxide monitors with variable speed fans to limit operation when not required; and
- Installation of energy efficient appliances.

Specification and implementation of water efficient fixtures and appliances will also be implemented, along with the selection of planted or indigenous and drought-tolerant or low water species.

5.15.3 Section J – National Construction Code

The retail components of the development have been assessed under BCA Section J1 and J2 and are capable of complying. Further analysis will be undertaken during design development to determine compliant glazing. Alternative JV3 modelling may be utilised to demonstrate compliance.

5.15.4 Green Star

Green Star is a voluntary environmental rating system for assessing different building types against environmental design targets. Block 11 at Central Park is a mixed use development targeting a 5 star rating and the Central Park Concept Plan.

The project has been registered with the Green Building Council and formal rating is anticipated within the first twelve months of the construction stage. To achieve a 5 star Green Star rating, the project must achieve more than 60 weighted points across all categories – management, indoor environmental quality, energy, transport, water, materials, land use, emissions and innovation – while meeting the minimum environmental conditional requirements. A full list of targeted Green Star initiatives and pathways, for each credit and category in relation to Block 11 is provided at Appendix L.

5.16 Crime Prevention Through Environmental Design

A Crime Prevention Through Environmental Design (CPTED) Report has been prepared by Elton Consulting and is provided at Appendix O. The report
demonstrates the proposal’s commitment to CPTED principles, consistent with the approved Concept Plan (as modified). In preparing the report Elton Consulting has undertaken consultation with the following stakeholders:

- City of Sydney Council Community Safety officer;
- NSW Police (Redfern Local Area Command and Parramatta Crime Prevention Office);
- NSW Department of Planning and Infrastructure;
- UTS Security Service;
- TAFE (Sydney Institute); and
- State Transit Authority (STA).

Redfern Local Area Command Meeting

A meeting was held with the Crime Prevention Officer from Redfern Local Area Command on 23 July 2014 to provide details of the Block 11 and to discuss key CPTED issues and to obtain feedback on CPTED matters for consideration in the ongoing design of the site. A detailed list of comments and Block 11 response is provided at Appendix O.

CPTED Features and Principles

The CPTED design and management features of Block 11 are:

- The Block 11 public domain will be legible, easy to navigate, promote social interaction and contain lively public spaces that are filled with activities compatible with surrounding uses;
- Block 11 will be located within a safe, locatable and easily accessed pedestrian and public transport network;
- Development of Block 11 will be managed to provide a safe and amenable environment for surrounding business owners, visitors and residents throughout the construction process;
- The specific crime prevention needs of special user groups (e.g. children, younger people, older people and people living with a disability) are understood and will be addressed;
- Residents, visitors, business owners and service providers (e.g. UTS, TAFE, CoS, NSW Police, fire, ambulance, security, State Transit, taxi operators, etc.) will be supported as active partners in creating a safe environment;
- Encourage residents and visitors to work and live a healthy lifestyle and take an active role in safety and injury prevention;
- Ensure publicly accessible areas will be safe for all user groups through the use of formal surveillance and signage; and
- Block 11 will have a legible, durable and well maintained built environment that is secure, feels safe to users and deters crime.

A Community Safety Management Plan has been prepared in accordance with the approved Concept Plan (as modified) to assess the design of Block 11, including the physical (built form) and non-physical (management) elements. The plan makes a number of recommendations to meet the CPTED principles including use of appropriate street and under-awning lighting, maintaining clear internal and external sight lines, providing appropriate security to back of house / loading dock areas, use of passive and active surveillance measures i.e. CCTV, providing access control at street level and to the basement, use of durable materials, providing appropriate way-finding signage and public domain amenity and ensuring maintenance is undertaken promptly.
The report concludes that the proposed development is considered worthy of support from a safety and crime prevention perspective, subject to the recommendations above and contained within the report.

5.17 Acoustic Impacts

A Noise Impact Assessment has been prepared by Acoustic Logic and is provided at Appendix P. The assessment provides an analysis of acoustic impacts associated with the proposed development and recommends acoustic treatments to ensure that internal noise levels comply with statutory requirements, as well as identifies potential noise sources generated by the site and determines noise emission goals to meet the acoustic requirements of the NSW EPA Industrial Noise Policy. The report also considered the potential impact of the operation of the development from mechanical plant and equipment. Details in relation to the noise impact during construction of the proposed development are provided in Section 5.16.

Traffic noise (particularly from Regent Street) is assessed as being the most noise impacting activity, given the proximity and location of Block 11, while noise from mechanical plant and equipment (including air conditioners) is likely to be generated by the development itself.

5.17.1 Nearest Receivers

The nearest potentially affected noise receivers are the residential properties on the eastern side of Kensington Street, southern side of the site on Wellington Street and future residential north of the site (being delivered as part of the Central Park project).

5.17.2 Traffic Noise

A survey of the existing noise environment was carried out, with an attended measurement conducted on 22nd August 2014. The following table (Table 13) presents the resultant noise levels at the proposed façade of the development.

<table>
<thead>
<tr>
<th>Location</th>
<th>Traffic Noise Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regent Street Corner</td>
<td>72dB(A) Leq(1 Hour)</td>
</tr>
<tr>
<td>Wellington Street</td>
<td>67dB(A) Leq(1 Hour)</td>
</tr>
<tr>
<td>O'Connor Street</td>
<td>66dB(A) Leq(1 Hour)</td>
</tr>
</tbody>
</table>

Table 13 – Measured Traffic Noise Levels

5.17.3 Background Noise Levels

Background noise levels measures at the nearest property boundary are set out below in Table 14 based on noise measurement results. Unattended noise logging was carried out on the site between 12-19 September 2014.

<table>
<thead>
<tr>
<th>Description</th>
<th>Day Noise Level 7am to 6pm (dB(A))</th>
<th>Evening Noise Level 6pm to 10pm (dB(A))</th>
<th>Night Noise Level 10pm to 7am (dB(A))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Repeatable Background L90,15min</td>
<td>52</td>
<td>49</td>
<td>50</td>
</tr>
</tbody>
</table>

Table 14 – Background Noise Levels
5.17.4 Consideration Requirements

Regent Street, to the south of the site, carries high traffic volumes of greater than 40,000 vehicles per day and is required to be assessed on conjunction with NSW State Environmental Planning Policy (Infrastructure) 2007 criteria. Traffic noise requirements of DCP 2012 pertaining to the control of traffic noise to living areas, and the Australian Standard AS2107:2000 have also been considered.

5.17.5 Noise Generators and Emissions

Potential noise generated by mechanical plant and equipment has also been assessed against the City of Sydney Standard Conditions and NSW EPA Industrial Noise Policy, with consideration of the nearest potentially affected noise receivers. City of Sydney Council’s standard conditions specify that the transmission of noise, being the sound pressure level at the boundary of any affected receiver is not to exceed the background noise by more than 5dB.

Mechanical plant

While mechanical plant and equipment has not yet been selected it is anticipated that all plant can be satisfactorily attenuated to levels complying with noise emission criteria through appropriate location and (if necessary) standard acoustic treatments such as noise screens, enclosures and in-duct treatments (silencers / lined ducting) or similar. It is also noted that the requirement for mechanical plant and equipment within Block 11 is largely reduced due to it being centralised, such as within the CTP. Accordingly, potential noise impact is further reduced.

Childcare

The potential impact to adjoining properties arising from the operation of the childcare centre has been considered based on the size, and occupancy numbers. Given this information, predicted noise levels to the future residents to the south and east of the site were determined, which both complied with the relevant criteria.

Building and management controls are required to manage noise impact from the proposed child care centre on Level 1 of the proposed development to the surrounding receivers, including the future residential receivers within the Block 11 development. These dwellings will comply with the relevant criteria based on the occupancy number, and assumptions within the Acoustic Report.

5.17.6 Internal Noise Criteria

The assessment recommends the glazing construction specifications for each of the proposed uses to adequately manage traffic noise and ensure adequate internal amenity.

Calculations were performed by Acoustic Logic by taking into account the orientation of windows, the total area of glazing, facade transmission loss and room sound absorption characteristics to allow the likely interior noise levels to be predicted.

The construction recommendations for each of the proposed uses to comply with the relevant internal noise criteria are set out below. The noise criteria for each use are provided within the acoustic report at Appendix P.

Childcare

The recommended acoustic treatments to the building facade to ensure internal noise levels comply with the criteria above is 6.38mm lamented glass to the perimeter of the proposed childcare centre.
Table 15 – Glazing Construction – Residential

<table>
<thead>
<tr>
<th>Façade</th>
<th>Level</th>
<th>Room</th>
<th>Glazing</th>
<th>Acoustic Seals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Facade</td>
<td>All Levels</td>
<td>Living Areas</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bedrooms</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bedrooms</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td>Southern Facade</td>
<td>All Levels</td>
<td>Living Areas</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bedrooms</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bedrooms</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td>Western Facade</td>
<td>All Levels</td>
<td>Living Areas</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bedrooms</td>
<td>6.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td>South Façade (facing</td>
<td>All Levels</td>
<td>Living Areas</td>
<td>10.38mm laminated</td>
<td>Yes</td>
</tr>
<tr>
<td>Willington Street)</td>
<td></td>
<td>Bedrooms</td>
<td>10.38mm laminated</td>
<td>Yes</td>
</tr>
</tbody>
</table>

In addition to glazing, the proposed construction methodology of concrete roofing and wall systems will not require any further acoustic treatment themselves, however any penetrations will be required to be acoustically sealed. With regard to ventilation requirements, all proposed tenancies are required to be provided with an alternative ventilation or air conditioning system to maintain adequate ventilation with the windows closed.

5.17.7 Assessment/Conclusion

The assessment concludes, the with the above recommendations implemented, noise intrusion from traffic associated with surrounding roads including Regent Street will comply with the relevant CoS Council, Australian Standards and the ISEPP noise provisions.

In order to control the noise impact associated with the use of the Childcare centre, the Acoustic report recommends the following management controls:

- Children’s outdoor play area to be operational between 8am and 6pm on any given day.
- Minimum 6.38mm laminated glazing with acoustic seals around perimeter is required, with minimum Rw of 30.
- Signs reminding staff and visitors to minimise noise at all times shall be installed at ingress/egress points from the child care centre.
- The outdoor area to the south of the building is used by children between the ages of 0-2 years.
- The outdoor area to the north of the building and under the building structure above to be used for children older than 2 year old.
- The underside of the building structure to the over 2 year olds external area is to be acoustically absorptive treatment such as envirospray, absorptive insulation or the like.
- Treatments should be to a minimum of 40% of the soffit area. Details to be provided at the CC stage of the project.
- Management is to ensure children are supervised at all times to minimise noise generated by the children whenever practical and possible.
- Install a contact phone number at the front of the centre so that any complaints regarding centre operation can be made.
5.18 Water Management

A Stormwater Report has been prepared by Mott Macdonald and includes a Stormwater Drainage Concept Plan. The report is provided at Appendix Y.

Flooding and Stormwater
The overall Central Park site is situated within the Blackwattle Bay (SWC 17) catchment. The site is traversed by two major drainage systems, the Prince Alfred Park Branch which has a catchment area of 25 hectares upstream of the site, and the Tooth’s Brewery Branch which has a catchment area of about 9 hectares. A site-wide stormwater system has been designed to accept the 20 year and 100 year design flows (piped and overland) respectively to connect to the detention tank beneath Chippendale Green prior to discharge to Sydney Water’s stormwater mains.

Final ground level RLs for Block11 provide the recommended minimum freeboard levels or higher to protect people and buildings. Overflows will be provided to cater for greater than 100 year ARI flows and will discharge into Council’s drainage system and/or overland flow path locate on O’Connor Street.

Erosion and Sediment Control
Erosion and sediment control measures are detailed in the report in accordance with the following principle:

- All existing surface pits will be protected, and all boundaries where there is potential for runoff to contaminate downstream property (private or public) will be protected by use of erosion fencing and earth berms.

The measures consider site access by construction vehicles, sediment and dust control, maintenance of erosion and sediment control devices and use of a temporary pump out system (where required). An Erosion and Sediment Control Plan is also provided.

Erosion and sediment control also forms part of the Construction Environmental Management Plan discussed in Section 5.19 and provided at Appendix T.

5.18.1 Water Sensitive Urban Design

Where possible, stormwater runoff from adjacent roads and paved areas will be collected and treated in local bioretention systems at ground level. Stormwater treatment design objectives include:

- Locate stormwater treatment areas adjacent pollutant sources and existing/proposed stormwater infrastructure. This will facilitate runoff capture and the conveyance of treated runoff;

- Offset the raingardens from the roadside - create a sense of separation from the road and gutter, so that they do not present as litter dumping areas / depressed kerb and gutter blisters;

- Infrastructure relating to the raingardens is proposed to be hidden from public view by the use of pavement grates; and

- Utilise seating elements and raised platforms to mitigate setdowns required to pond and treat the stormwater and maintain public safety.
5.19 Waste Management

A Waste Management Statement has been prepared by Arup and is provided at Appendix S. The statement provides details in relation to the waste generated during operation of the proposed development. Details in relation to the waste generated during construction of the proposed development are provided in Section 5.19. The statement makes an assessment against the legislative requirements including the Protection of the Environment Operations Act, 1997; Waste Avoidance and Resource Recovery Act, 2001; NSW Waste Reduction and Purchasing Policy, 2007; and Council of the City of Sydney Policy for Waste Minimisation in New Developments, 2005; as well considers Green Star requirements.

5.19.1 Operational Waste

The proposed development is likely to generate the following waste streams:
- Mixed general waste;
- Co-mingle recycling;
- Electronic waste;
- Hard rubbish; and
- Cardboard and paper recycling (commercial / retail only).

Relevant waste generation is from residential uses, general retail, lobby areas and childcare centre use are outlines below. The specific responsibilities and waste movement procedures are included within the Waste management Plan (Appendix S).

5.19.2 Residential Waste

The main waste facilities for residential waste from the proposed development will include:
- 3 x waste chutes (general waste) to service residential levels 1 – 13 (spread across three building cores), with discharge of waste directly into a compactor in the central waste storage area on Basement 1 (at the base of each core);
- 3 x compactors – located within each of the waste rooms on Basement 1
- 1x 240L co-mingle recycling MGB (Mobile Garbage Bin) on each residential level, to be rotated every 2-3 days with empty bins in the central waste storage area (32 in total including 3 on each floor);
- Waste collection rooms on all residential floors above ground (general 3 on each level), each holding a recycling MGB and a waste chute compartment;
- 2 x central waste storage area / Main Garbage Room (MGR) located on Basement 1, and
- 2 x central recycling storage room located on Basement 1, and

As shown on the architectural plans, waste rooms are located in B1 that act as the termination point for the chutes from levels above prior to collection, waste will be transferred from these rooms to the centralised storage rooms by building management.

Centralised Waste Storage Rooms - Residential

Centralised storage rooms are located on basement Level 1 to allow for efficient collection and handling. Table 16 below outlines the location and details of these waste rooms.
**Table 16 – Centralised Storage Rooms - Residential**

<table>
<thead>
<tr>
<th>Location</th>
<th>Size</th>
<th>Bins</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL WASTE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement 1 East</td>
<td>35sqm</td>
<td>4 x 1,110L Bins in carousel with compactor</td>
<td>This room will receive waste from the eastern core of the building (Approximately 1/3 of waste) via the eastern waste chute.</td>
</tr>
<tr>
<td>Basement 1 West</td>
<td>20.6sqm</td>
<td>4 x 1,110L Bins in carousel with compactor</td>
<td>This room will receive waste from the central and western cores of the building (approximately 2/3 of waste);</td>
</tr>
<tr>
<td>RECYCLING</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.2</td>
<td>17 x 240L bins</td>
<td></td>
<td>This room will receive recycling bins from upper floors on the eastern core of the building (approximately 1/3 of recycling).</td>
</tr>
<tr>
<td>24.5sqm</td>
<td>34 x 240L bins</td>
<td></td>
<td>This room will receive recycling bins from upper floors on the central and western cores of the building (approximately 2/3 of recycling).</td>
</tr>
<tr>
<td>HARD RUBBISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13sqm</td>
<td></td>
<td></td>
<td>This room will provide a central storage area for hard rubbish from residential areas of the building.</td>
</tr>
</tbody>
</table>

**5.19.3 Childcare / Retail Waste**

The retail tenancies at ground level and future childcare centre on level 1 are expected to be used for general and food retail uses purposes and as such will produce minimal waste. Accordingly, the waste collected from these tenancies will be stored in the building’s central waste storage area prior to collection.

- 1 x central landfill storage rooms which includes a chute
- 2 x Centralised waste storage rooms on basement level 1
- Waste chute located between level 1 (childcare) and ground floor
- Compactor

**Centralised Waste Storage Rooms – non-residential**

Centralised storage rooms are located on basement Level 1 to allow for efficient collection and handling. **Table 17** below outlines the location and details of these waste rooms.

**Table 17 – Centralised Storage Rooms – non-residential**

<table>
<thead>
<tr>
<th>Location</th>
<th>Size</th>
<th>Bins</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL WASTE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement 1 East</td>
<td>28sqm</td>
<td>4 x 1,110L Bins in carousel with compactor</td>
<td>This room will receive waste from commercial areas via a waste chute.</td>
</tr>
<tr>
<td>Basement 1 West</td>
<td>20sqm</td>
<td>22 x 240L bins (co-mingle recycling)</td>
<td>This room will receive commercial recycling bins rotated from upper floors.</td>
</tr>
<tr>
<td>HARD RUBBISH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement 1 East</td>
<td>12.5sqm</td>
<td></td>
<td>This room will provide a central storage area for hard rubbish from commercial areas of the building.</td>
</tr>
</tbody>
</table>
5.19.4 Collection

Waste collection services for each residential waste stream will be provided by Council collection. Collection of non-residential waste will be carried out by private contractor. Written evidence of a valid and current contractor with a licenced collector for waste and recycling collection and disposal will be provided and held on site at all times.

Collection will occur with basement level B1, with Council being provided secure access to the basement, and private contractors waste collection coordinated with Building Management.

Residential general waste collection will occur twice per week, with comingled recycling occurring once a week. Retail waste collection will occur three times a week, except for cardboard / paper recycling which will be collected once a week, and comingled recycling that would be collected twice a week. Electronic waste and hard rubbish from both residential and retail uses will be collected monthly or as necessary.

5.19.5 Amenity

The garbage chute, rooms on each level, as well general waste management areas have been designed so as not to be visible from the exterior of the building. The waste management equipment to be selected will not generate significant noise and will be located in areas containing adequate acoustic insulation. Importantly the majority of waste storage, movement and collection will occur

Any putrescible waste to be collected will be stored in a Council approved containers and all waste storage areas will be fitted with mechanical vertical ventilation systems. Waste will be collected regularly which will reduce the risk of odour to building occupants and neighbours.

Overall, the proposed waste management areas and waste management practices will ensure high levels of occupant and neighbourhood amenity.

5.20 Construction Management

A Construction Environmental Management Plan (CEMP) has been prepared by Frasers Broadway Pty Ltd and is provided at Appendix T. The CEMP is to be read in conjunction with the Construction Waste Management details contained within the Waste Management Plan prepared by Arup and provided at Appendix S and the Erosion and Sediment Control Plan prepared by Mott Macdonald and provided at Appendix Y. The CEMP addresses the following issues:

- Heritage and archaeology;
- Noise and vibration;
- Air quality;
- Soil and water management;
- Chemical management;
- Traffic management; and
- Health and safety management.

The CEMP will be revised and issued to the Private Certifying Authority prior to the commencement of the works.
5.20.1 Construction Traffic
The traffic arrangements associated with constructing Block 11 would be subject to a Construction Traffic Management Plan prepared by a suitably RMS qualified transport planner / traffic engineer. This report would be prepared at the time of preparing the Construction Certificate (CC) application once construction methods approach for the development have been finalised.

5.20.2 Cumulative Construction Impacts
Consideration has been given to the cumulative construction impacts likely to occur on the Central Park site during the construction of Block 11. In particular, additional consideration is to be given to the location of access and egress of cars and construction vehicles. Appropriate management and mitigation is included within the CEMP and will be appropriately conditioned by the DPE, with input from City of Sydney Council.

5.20.3 Construction Noise and Vibration
During construction, noise and vibration will be managed in accordance with the CEMP prepared by Frasers Broadway Pty Ltd and provided at Appendix T.

Based on typical construction practices and equipment used, it is anticipated that the principal source of noise emissions during the construction process will be generated during the ground excavation phase including from jack hammering and piling works.

Noise management will include noise and vibration monitoring, carrying out of works during approved hours and minimising the duration of high noise activities, and a register of noise complaints will be maintained.

Details regarding mitigation of construction noise and vibration have also been included within the Acoustic Report at Appendix P. These include the following:

- Selection of appropriate appliances and processes to minimise noise impacts;
- Use of acoustic screening or barriers between the source and receivers;
- Use of silencing devices or baffles;
- Consideration of installation of rubber matting to minimise acoustic impact of materials handling;
- Treatment of specific equipment and regular maintenance; and
- Noise and vibration monitoring.

5.20.4 Construction Waste and Traffic
Construction waste and a CWMP are detailed in the Waste Management Statement prepared by Arup and provided at Appendix S. Construction of the proposed development is likely to generate excavation and construction waste streams, with natural materials, concrete, steel reinforcement, plastics and recyclable materials likely to comprise the greatest volume. The primary goal for waste management in the construction phase is to ensure at least 80% of waste is recycled or reused, which also supports Green Star goals.

During construction, suitable areas on- and/or off-site will be provided and will include adequate space and access for:

- Storage of building materials;
- Storage of demolition and construction waste;
- Sorting of demolition and construction waste; and
5.20.5 Erosion and Sediment Control Plan

An Erosion and Sediment Control Plan is provided as part of the Flooding, Stormwater and Mott Macdonald and provided at Appendix Y. The principle for erosion and sediment control is also described in Section 5.17.

5.21 Development Staging

The proposed development is intended to be delivered as a single project. However, as part of the construction this includes successive phasing of the works and there is allowance for contingency in the delivery.

The staging of the proposed development in relation to the remainder of the Central Park site is in accordance with the approved Concept Plan (as modified) which identified the delivery of Central Park in six stages. Block 11 is to be delivered as part of Stage 5.

5.22 BCA

A Building Code of Australia Assessment Report has been prepared by City Plan and is provided at Appendix U. The report establishes the proposal’s compliance with the BCA and relevant Acts and Regulations. The proposal comprises some areas of non-compliance which can be addressed by justification against the performance requirements of the BCA, and some minor deemed-to-satisfy non-compliances which can be addressed by amendments to the plans.

The report concludes that the proposal is capable of complying with the BCA, including in relation to structure and fire safety, and that the areas of non-compliance with the deemed-to-satisfy provisions will be addressed by alternative solutions which will not significantly impact on the design of the proposed development.

5.23 Accessibility

An Access Review has been undertaken by Accessibility Solutions Consulting and is provided at Appendix V. The review identifies that the proposal incorporates the following design elements:

- The access to the ground floor retail areas, child care centre, adapted Castle Connell Hotel and lift lobbies will provide appropriate access for people with disabilities in accordance with Part D3 of the BCA, DDA Premises Standards and the Sydney DCP 2012; and

- The lifts provide access from the ground floor to all upper levels, which incorporate appropriate width corridors for Turning and Passing and enabling access to all apartment entrance doorways to comply with Table D3.1, Parts D3.2, D3.3 of the BCA and DDA Premises Standards; and

- The development provides forty-five (45) accessible parking spaces, one (1) for the retail/commercial/childcare and forty-four (44) for the adaptable apartments to comply with Part D3.5 of the BCA, DDA Premises Standards and the Sydney DCP 2012;

- There will be at least 15% of the two-hundred and ninety-six (296) apartments – forty-four (44) that will be adaptable generally in accordance with AS4299,
which is consistent with SEPP 65, SEPP 65 Design Code and the Sydney DCP 2012 clause 3.12.2.

The review concludes that the proposed development has demonstrated an appropriate degree of accessibility in accordance with the AS1428 series, BCA, DDA Access to Premises Standards (including DDA Access Code) and the Commonwealth Disability Discrimination Act (DDA) as well as SEPP 65 and the Sydney DCP 2012.

5.24 Fire Safety

A Preliminary Fire Safety Engineering Review has been prepared by Defire (provided at Appendix W), in conjunction with the BCA Report prepared by City Plan Services. The intent of the review was to determine whether we believe the design can be demonstrated to achieve compliance with the performance requirements of the BCA.

As part of this review Defire has determined that the proposal will incorporate alternative solutions complying with the performance requirements of the National Construction Code Series 2014 Volume One – Building Code of Australia (BCA). These alternative solutions are listed within the Fire Safety Engineering Review (Appendix W).

The alternative solutions for the building will be developed as part of the ongoing design and development process and documented in a format suitable for submission to the relevant approval authorities. However, Defire considers that it is possible to develop alternative solutions for the issues identified to demonstrate compliance with the relevant performance requirements of the BCA without major changes to the proposed design.

5.25 Contamination

The site, comprising Block 11 is proposed to be remediated and validated via implementation of the approved Remedial Action Plan (JBS 2008) (in accordance with the approval granted by the Minister on 15 August 2008 (MP 07_0163)) and subsequent amendments as endorsed by a NSW EPA accredited site auditor.

Advice regarding site contaminations and remediation has been prepared by JBS&G (Appendix K). This advice states that following completion of remediation works for Block 11 (in accordance with the approval specified above), a Validation Report and accompanying Environmental Management Plan (EMP) are to be prepared by a suitably qualified environmental consultant documenting the completed works and stating that the site is considered suitable for the proposed mixed use development, subject to ongoing implementation of the EMP to address requirements for ongoing operation of the groundwater treatment system. It is noted that as the groundwater treatment system is to be installed within the building, the remediation works will be integrated with the basement and infrastructure construction activities including hydraulic services.

5.26 Geotechnical

A Geotechnical Report has been prepared by JK Geotechnics and is provided at Appendix J, to obtain geotechnical information on subsurface conditions as a basis for comments and recommendations on excavation conditions, retention, groundwater and footing design.

The investigations undertaken by JK Geotechnics identified the subsurface conditions consisting of sandstone bedrock (at 5.9m) with residential sand and
clay above (between 2 – 6m), and fill to depths of 3.3m. Groundwater measured as of June 2014 identified groundwater at a depth of 2.09m below the surface.

The relevant comments and recommendations of the Geotechnical Report including excavation, excavation support, foundations and dewatering have been considered by the project engineers and Architects when designing basement, shoring, footings and building above.

5.27 Contributions

The Affordable Housing Planning Agreement, between the Redfern Waterloo Authority and the landowner, was accepted by Deed Poll dated 29 July 2007 and outlines how contributions towards affordable housing will be calculated for the Frasers Broadway site. A payment plan was established and payments have been made in instalments over the last five years. The AHPA does not specifically relate to Block 11, nor is there an Owners Consent Deed for Block11.

The Voluntary Planning Agreement between the Minister for Planning and the landowner dated 9 February 2007 requires that ‘design excellence’ be achieved in the architecture developed across the site. In relation to Block 11, three Australian architectural firms were invited to take part in a design competition. The process is described in Section 5.4 and a competition report is provided at Appendix I.

5.28 Site Suitability

Having regard to the characteristics of the site and its location both within the overall Central Park site and Central Sydney, the proposal is considered suitable for the site as it:

- Is located within Central Park which is within the Sydney City sub-region which is nominated as a ‘Global Centre’;
- Will take place in a highly modified and disturbed urban environment and will not impact on biodiversity values;
- Will contribute to the enhancement of a key CBD location that is presently underutilised;
- Will accord with the principles of Ecologically Sustainable Development by contributing to the proper management, development and conservation of the artificial resources of the site;
- Is within walking distance of other services and amenities, including public transport, retail and employment opportunities offered by the CBD;
- Is in close proximity to the pedestrian and cycle facilities within Central Park; and
- Will support the provision of a high quality public domain, in particular Chippendale Green located to the east of the proposal.

5.29 Public Interest

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

- Will promote the social and economic welfare of the community by providing an improved urban environment;
- Will provide a substantial quantum of residential accommodation within an existing urban area which has easy access to good public transport;
- Will provide residential accommodation in support of Sydney’s growing economy and population;
Will encourage patronage on public transport by being in close proximity to rail, light rail, bus and ferry services;

Will encourage alternative modes of travel by providing bicycle parking for residents, visitors and retail patrons;

Will provide community connections within the overall Central Park development;

Will achieve a 5 star Green Star rating;

Will contribute to the achievement of specific targets relating to new jobs and new dwellings;

Will address the provision and maintenance of affordable housing by adhering to the agreement established between the Redfern Waterloo Authority and the landowner; and

Has responded to extensive consultation undertaken with various levels of government, authorities and the community.
6.0 Conclusion

This Environmental Impact Statement (EIS) has been prepared to consider the environmental, social and economic impacts of the development of a mixed use building known as Block 11, within the Central Park site. The EIS has addressed the issues outlined in the Director General’s Requirements (see Appendix B) and accords with Schedule 2 of the EP&A Regulation in regards to the form and content of the EIS.

The carrying out of the proposal is justified and warrants approval for the following reasons:

- The proposal is permissible with consent and meets the requirements of the relevant statutory planning controls;
- The proposal is generally consistent with the approved Concept Plan (as modified) which establishes land uses, building envelopes, street layouts and general development parameters;
- Where concurrent amendments to the Concept Plan are proposed, the design response provides significant public domain gestures and improvements to the permeability of the ground plane;
- The proposal is consistent with the principles of ecological sustainable development as defined by Schedule 2 Clause 7(4) of the Environmental Planning and Assessment Regulation 2000;
- The proposal exhibits a high quality design, achieving a strong relationship with the surrounding future and existing built form;
- The proposal provides a high standard of amenity through a mix of unit types and sizes, outlook, natural daylight and ventilation, and provision of internal and external communal areas;
- The proposal provide childcare space in accordance with Central Park Concept Plan;
- The proposal encourages active use of public transport with attributes including secure bicycle storage and end of journey facilities, and its proximity to public transport hubs, walking paths and amenities; and
- The proposal contributes to the activation of Central Park through provision of active ground level uses.

In light of the environmental, social and economic benefits of the proposal and the planning merit and significant public benefits associated with the proposal, it is recommended that this application be approved.
### 7.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed works are detailed in Table 18 below (in accordance with 7(e) of Schedule 2 of the Environmental Planning Assessment Regulation 2000. These measures have been derived from the previous assessment within this EIS and those detailed in appended consultants’ reports.

#### Table 18 – Mitigation Measures

<table>
<thead>
<tr>
<th>Category</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPTED</td>
<td>- The proposal is to adhere to the recommendations made in the CPTED (Appendix O) in order to meet the CPTED principles including</td>
</tr>
<tr>
<td>Wind</td>
<td>- The extent of wind mitigation required at those locations that exceed the wind distress criterion (identified in the report provided at Appendix Q) is to be determined as part of ongoing design development prior to commencement of the works.</td>
</tr>
<tr>
<td>Reflectivity</td>
<td>- All exterior façade materials are to have a reflectivity coefficient of 20% or less.</td>
</tr>
<tr>
<td>BCA</td>
<td>- The proposal to comply with the recommendations of the BCA Compliance Statement (Appendix U).</td>
</tr>
<tr>
<td>Transport and Accessibility</td>
<td>- The proposal is to comply with the recommendations of the Traffic and Parking Assessment Report provided at Appendix N.</td>
</tr>
<tr>
<td>Noise</td>
<td>- Plant and equipment is to be selected to ensure compliance with noise criteria identified in the Noise Impact Assessment (Appendix P) and acoustic treatments are to be provided as necessary in accordance with the requirements set out in this report.</td>
</tr>
<tr>
<td>Drainage and Flooding</td>
<td>- WSUD is to be undertaken in accordance with the site wide WSUD strategy.</td>
</tr>
<tr>
<td>- The WSUD strategy is to inform the WSUD measures to be implemented to assist in achieving a 5 star Green Star rating.</td>
<td></td>
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<tr>
<td>Waste Management</td>
<td>- Waste Management is to be carried out in accordance with the details and recommendations of the Waste Management Plan prepared by Arup, provided at Appendix T.</td>
</tr>
<tr>
<td>Construction Management</td>
<td>- A final CEMP is to be submitted to the Private Certifying Authority prior to the commencement of the works.</td>
</tr>
<tr>
<td>Traffic</td>
<td>- Construction traffic, including traffic control, entering and exiting the site, driver protocols and parking is to be managed in accordance with the preparation of a final construction traffic management plan.</td>
</tr>
<tr>
<td>Noise and Vibration</td>
<td>- Noise and vibration is to be managed in accordance with the recommendations of the Acoustic Report (Appendix P).</td>
</tr>
<tr>
<td>Waste</td>
<td>- The proponent is to provide a detailed Waste Policy Design Compliance Certificate for the Construction Certificate application, which is to include details regarding disposal and recycling of different materials expected from demolition, construction, and the transport and destinations of these materials.</td>
</tr>
<tr>
<td>Erosion and Sediment Control</td>
<td>- Erosion and sediment control is to be managed in accordance with the Erosion and Sediment Control Plan (Appendix Y).</td>
</tr>
</tbody>
</table>