Traffic and Parking Assessment Report

Prepared for: Frasers Broadway Pty Ltd

November 2014

Report No: PT14001r01
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1.0 Introduction
This report has been prepared on behalf of Frasers Broadway Pty Ltd to accompany a State Significant Development Application for a mixed use proposal known as Block 11 within the Central Park development, Chippendale. Block 11 forms the final stage of building development within Central Park precinct.

This study has reviewed the background assessments of the proposal, approvals, traffic conditions near the site, the likely traffic generation of the development proposal, parking provision and proposed access arrangements.

The remainder of this report is set out below:
- Chapter 2 summarises the Director GParkenreal requirements for the application
- Chapter 3 provides an overview of the project to date
- Chapter 3 describes the development proposal
- Chapter 4 reviews the traffic implications of the proposal
- Chapter 5 assesses the off street car park provision and servicing arrangements
- Chapter 6 reviews the other transport implications arising from the proposed development
- Chapter 7 presents a potential approach for the development of a Workplace Travel Plan / Travel Access Guide, and
- Chapter 8 presents a summary and concludes the study.
2.0 Director General Requirements

The Department of Planning and Infrastructure have issued Director General Requirements for the project. Each requirement is summarized below along with references in this report where it has been considered / responded to:

<table>
<thead>
<tr>
<th>DGR</th>
<th>Report Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>• detail access arrangements at all stages of construction</td>
<td>Section 4.1</td>
</tr>
<tr>
<td>• detail support of non-private vehicle travel methods such as provisions for car sharing schemes</td>
<td>Section 6.1.6</td>
</tr>
<tr>
<td>• detail service vehicle parking arrangements that enable entry and exit in a forward direction</td>
<td>Section 6.2</td>
</tr>
<tr>
<td>• provide accurate details of peak hour vehicle movements and assess the impacts of this traffic on the local road network, including intersection capacity</td>
<td>Section 5.1</td>
</tr>
<tr>
<td>• include an assessment of the impact upon pedestrian and vehicular traffic with the new link road between O’Connor Street and Park Lane</td>
<td>Section 6.4</td>
</tr>
<tr>
<td>• 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)</td>
<td>Section 6.1</td>
</tr>
<tr>
<td>• include a Workplace Travel Plan and Travel Access Guide for employees, residents and visitors to the site</td>
<td>Section 7</td>
</tr>
</tbody>
</table>
3.0 Project Summary

3.1 Original Concept Plan
In February 2007, the Carlton and United Brewery site (now known as Central Park) was approved for redevelopment under the Part 3A process. The arrangements of the original approval for the site are shown in Figure 1.

![Figure 1 – Original Concept Plan Site Development Configuration](image)

The concept plan assumed a floor space ratio of 4.4:1 for the site which equated for the following potential development yield:

- 92,773m² FSA of commercial areas
- 12,191m² FSA of retail areas
- 1,689 residential apartments with 15% studio, 30% one bedroom, 40% two bedroom and 15% three bedroom

3.2 Transport Assessment of Original Concept Plan
A traffic and transport assessment was undertaken by Halcrow of which the potential traffic impacts of the development were assessed. This report included recommendations for infrastructure improvements on the surrounding road network which were considered in the approval of the original concept plan.
The traffic impacts of the proposal as a whole and the recommendations of the Halcrow (formally Masson Wilson Twiney) report were analysed in detail by the Roads and Maritime Services using a Paramics Microsimulation model. The RMS found that the potential traffic impacts of the proposal were acceptable and the proposed infrastructure works to support the development adequate to accommodate potential site demands.

### 3.3 Modified Development Plan Traffic Impact Assessments

The site was purchased in June 2007 by Frasers. Through the course of a number of submitted and approved modified concept plans (the last being in January 2013), a number of amendments were approved by the Department of Planning.

During the course of planning for the site and development delivery, a number of changes to the original concept plan have been undertaken. Further, all changes have been subject to traffic impact assessment reports.

Below is a summary of the relevant amendments to the original:

- increase in site area and gross floor area with revised residential and commercial land use mix
- changes to building envelopes for the 11 development blocks
- increase in area of public open space
- reduced car parking provision (maximum of 2,000 car spaces) provided within various
- combined underground car parks proposed to minimise surface traffic within the site
- removal of some internal streets to create a low speed traffic environment within the precinct.

A summary of the changes and associated increases in traffic generation of the site as a whole is presented below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Traffic Change</th>
<th>Overall Site Traffic Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Approved Concept Plan</td>
<td>---</td>
<td>493 vph</td>
</tr>
<tr>
<td>Block 2 &amp; Block 5 Modification</td>
<td>+39vph</td>
<td>532 vph</td>
</tr>
<tr>
<td>Block 2 &amp; 5 Mix Modification</td>
<td>+3 vph</td>
<td>535 vph</td>
</tr>
<tr>
<td>Kensington St Modification</td>
<td>+ 5 vph</td>
<td>540 vph</td>
</tr>
<tr>
<td>Block 8 Submission</td>
<td>+ 5 vph</td>
<td>545 vph</td>
</tr>
<tr>
<td>Block 1 Modification</td>
<td>+ 33 vph</td>
<td>578 vph</td>
</tr>
<tr>
<td>Block 4 Modification</td>
<td>+ 14 vph</td>
<td>592 vph</td>
</tr>
</tbody>
</table>

In the most recent traffic impact assessment for modifications to Block 4N, the traffic report\(^1\) prepared by GTA consultants found all intersections surrounding the site would continue to operate at a satisfactory level of service with an overall site traffic generation of 592 vph. This traffic report noted the most recent approval mix of the precinct as a whole namely MOD 9.

A summary of the GFA by block for the approved MOD 9 application is provided below.

---

\(^1\) Block 4N Traffic Report – GTA Consultants October 2014
<table>
<thead>
<tr>
<th>Location</th>
<th>Non-Residential (GFA)</th>
<th>Residential GFA</th>
<th>Total GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block 1 (Split)</td>
<td>1,153</td>
<td>23,362</td>
<td>24,515</td>
</tr>
<tr>
<td>Block 4N (Split)</td>
<td>25,930</td>
<td>0</td>
<td>25,930</td>
</tr>
<tr>
<td>Block 4S</td>
<td>962</td>
<td>21,364</td>
<td>22,326</td>
</tr>
<tr>
<td>Block 4b</td>
<td>3,898</td>
<td>0</td>
<td>3,898</td>
</tr>
<tr>
<td>Block 2</td>
<td>19,235</td>
<td>48,391</td>
<td>67,626</td>
</tr>
<tr>
<td>Block 3</td>
<td>5,088</td>
<td>5,955</td>
<td>11,043</td>
</tr>
<tr>
<td>Block 5</td>
<td>1,432</td>
<td>26,884</td>
<td>28,316</td>
</tr>
<tr>
<td>Block 6</td>
<td>2,000</td>
<td>0</td>
<td>2,000</td>
</tr>
<tr>
<td>Block 7</td>
<td>1,000</td>
<td>0</td>
<td>1,000</td>
</tr>
<tr>
<td>Block 8</td>
<td>135</td>
<td>14,744</td>
<td>14,879</td>
</tr>
<tr>
<td>Block 9 (SC)</td>
<td>0</td>
<td>26,598</td>
<td>26,598</td>
</tr>
<tr>
<td>Block 10</td>
<td>300</td>
<td>1,541</td>
<td>1,841</td>
</tr>
<tr>
<td>Block 11</td>
<td>1,249</td>
<td>24,276</td>
<td>25,525</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>59,515</strong></td>
<td><strong>195,985</strong></td>
<td><strong>255,500</strong></td>
</tr>
</tbody>
</table>

Therefore at this stage of proceedings the traffic assessment of the site generating 592 vph during peak periods has been fully assessed and was found to satisfactory.
4.0 Proposed Development

The State Significant Development Application seeks approval for the redevelopment of Block 11 as a mixed use/residential building, with associated non-residential/retail uses located on lower levels of the building consistent with the Concept Plan.

The location of the block in relation to the Central Park development is shown in **Figure 2**

**Figure 2 – Block 11 Location**

The proposed building consists of between 12 and 14 storeys, located above three levels of basement car parking containing a total of 235 parking spaces, service area and storage for residents.

The development would achieve 1,249m$^2$ of non-residential uses and 24,276m$^2$ of residential uses. Of note is that the total yield for Block 11 would be approximately 588m$^2$ less than that which was assumed in the GTA Traffic Report analysis.

Of the residential component, the following number of dwellings would be achieved with the proposal:
- Residential: 24,276m² with the following unit yield
  - 64 x studio dwellings
  - 106 x one bedroom dwellings
  - 107 x two bedroom dwellings
  - 19 x three bedroom dwellings
  - Total 296 dwellings

- Retail / non-residential: 1,267m²

Of the 1,267m² of non-residential area, 607m² would be allocated to a retail use, the remainder 660m², would be allocated to the child care centre.

A comparison between the areas for Block 11 approved in MOD 9 to that which are now proposed is provided below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Non-Residential (GFA)</th>
<th>Residential GFA</th>
<th>Total GFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mod 9 Block 11</td>
<td>1,249</td>
<td>24,276</td>
<td>25,525</td>
</tr>
<tr>
<td>Proposed Block 11</td>
<td>1,413</td>
<td>24,108</td>
<td>25,521</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td><strong>+164 sqm</strong></td>
<td><strong>-4 sqm</strong></td>
<td><strong>-4 sqm</strong></td>
</tr>
</tbody>
</table>

From Table 3 it is noted that the current proposal includes a small increase in retail floor area of 164m² and a minor decrease to the GFA of the residential uses.

For the child care component, the proposed child care centre would provide a maximum of 90 places for children and 19 staff.

4.1 Parking / Access Arrangements

The key traffic, access and parking components of the development include:

- Entry / exit access via O’Connor Street
- All servicing within the first level of the basement car park
- Design provision to allow a Sydney City Council garbage truck to enter and leave the basement parking area in a forward direction
- A total parking provision of 269 spaces with the following allocation
  - 235 spaces for residential uses (including 44 accessible parking spaces)
  - 3 spaces for retail uses
  - 4 spaces for child care uses
  - 10 spaces for ‘car share’ vehicles
  - 2 spaces for service vehicles
  - 12 motorcycle spaces for residents
  - 1 motorcycle space for retail visitors
- A total of 296 bicycle spaces for residents, 31 for retail and 4 for the child care centre. All bicycle parking for residents would be provided within secure storage units.
All parking for uses on site excluding the drop off / pick up spaces for the Child Care Centre is proposed within a common three floor basement parking area. The drop off and pick up spaces to service the child care centre would be located on the western side of Kensington Street immediately south of O’Connor Street.

Plans of the proposed ground floor and basement levels can be found in Appendix A of this report.

4.2 Construction Staging

The development as a whole would be constructed over a single stage. The traffic arrangements associated with constructing Block 11 would be subject to a Construction Traffic Management Plan prepare 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.
5.0 Potential Traffic Impacts

As stated in Section 2, the traffic impacts of all modified planning proposals to date have been fully assessed with the most recent traffic report\(^2\) confirm that the traffic impacts of a site traffic generation of 592 vph in the peak periods was acceptable.

From Table 3 it is noted that the current proposal would provide a minimal increase of 164\(^2\) of retail floorspace. As with the acceptable approach of all previous traffic reports to date, the small retail uses on site have been considered ancillary retail for the population within and surrounding the precinct and thus not traffic generators in their own right.

Thus the traffic impacts of the proposed minor increase in retail floorspace and of the development as a whole are considered acceptable.

Of further note is the proposal now includes no vehicular connection to Wellington Street 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. That is, the development would not create any additional vehicular trips on Wellington Street.

5.1 Potential Traffic Generation

For completeness and to respond to the DGR requirements, the following presents an estimate of traffic generation of the development. 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 of the development is expected to generate a total of 64 peak hour trips two way.

The potential traffic generation of the retail component has been omitted in line with the assumptions of previous traffic reports. As is the case for most of the retail uses within Central Park they would support mainly the immediate population of Central Park and would not be traffic generators in their own right.

This would also be the case for the proposed Child Care centre use. With a shortfall of child care places in the Sydney CBD, it is expected that most of the places would be taken up by residents of Central Park and / or residents immediately surrounding Central Park.

Overall the traffic impacts of the proposal have been fully assessed in previous investigations and were considered acceptable to the RMS.

\(^2\) Block 4N Central Park Traffic Report - GTA Consultants October 2014
6.0 Parking and Access Assessment

6.1 Parking Provision Assessment

6.1.1 Residential Component

The City of Sydney Council’s Local Environmental Plan 2005 Chapter 2 Central Sydney (LEP) and Sydney Development Control Plan 2012 (DCP) provides parking controls for various types of development uses.

For residential uses, the LEP stipulates the following maximum parking rates:

- Studio units 0.25 spaces per unit
- 1 bedroom units 0.5 spaces per unit
- 2 bedroom units 1.2 spaces per unit
- 3 bedroom units 2 spaces per unit.

Applying the above rates to the development, the residential component would be permitted the following maximum parking provision as summarized in Table 4.

<table>
<thead>
<tr>
<th>Type of Dwelling</th>
<th>No.</th>
<th>Rate (spaces)</th>
<th>Max Parking Permitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studio dwelling</td>
<td>64</td>
<td>0.25 per dwelling</td>
<td>16</td>
</tr>
<tr>
<td>One bedroom dwelling</td>
<td>106</td>
<td>0.5 per dwelling</td>
<td>53</td>
</tr>
<tr>
<td>Two bedroom dwelling</td>
<td>107</td>
<td>1.2 per dwelling</td>
<td>128</td>
</tr>
<tr>
<td>Three bedroom dwelling</td>
<td>19</td>
<td>2.0 per dwelling</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>235</td>
</tr>
</tbody>
</table>

From Table 4 it can be seen that the residential component would permit a maximum of 235 spaces in accordance with the LEP. As the basement parking area includes no more than 235 spaces for residents, the residential parking provision complies with the LEP and is considered satisfactory.

In accordance with the DCP, the proposal does not include any visitor parking for the residential component and thus is considered satisfactory.

6.1.2 Non-Residential Uses

For non-residential uses, the LEP provides the following formula for calculating the requirements:

\[
\text{Max car parking} = \frac{\text{Total Other FSA}}{\text{Total FSA within development}} \times \frac{\text{Site Area}}{50}
\]

The parking needs for non-residential uses is provided further below.
6.1.3 Service Vehicle Parking
The DCP also requires parking for service vehicles as follows:
• residential 1 space per first 50 apartments + 0.5 for every 50 apartments thereafter, and
• retail (shops) 1 space per 350m² GFA (up to 2,000m²).

6.1.4 Motorcycle Parking
The DCP also requires motorcycle parking be provided at a rate equivalent to at least one car space per 50 car parking spaces provided.

6.1.5 Bicycle Parking
On the matter of parking for bicycles, the DCP requires the following:

- one space per dwelling for residential tenants plus one space per 10 dwellings for residential visitors.
- one space per 25m² for employees of retail uses plus an additional 2 spaces plus 1 space per 100m² over 100m² GFA.

6.2 Car Sharing
The Sydney City Council Car Share policy provides guidance on the initiatives of Council to increase access to car share schemes within the public car parking realm. This includes on street spaces and spaces within public car parks throughout the CBD.

As per the planning controls map of the Sydney City Council LGA, Central Park resides within an area under the control of the Sydney City LEP 2005.

6.3 Non-Residential Uses Parking Provision Requirements
Applying the rates above, the non-residential parking provision requirements are summarised in Table 5.

Table 5 – Non-Residential Component Parking Requirements

<table>
<thead>
<tr>
<th>Use</th>
<th>No./Area (GFA)</th>
<th>Parking Required</th>
<th>Parking Provided</th>
<th>Complies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Vehicles – Residential</td>
<td>296 dwellings</td>
<td>3</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
<td>Service Vehicles – Retail</td>
<td>1,267m²</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicycle – Residential</td>
<td>296 dwellings</td>
<td>296</td>
<td>296</td>
<td>Yes</td>
</tr>
<tr>
<td>Bicycle – Retail</td>
<td>607m²</td>
<td>31</td>
<td>31</td>
<td>Yes</td>
</tr>
<tr>
<td>Bicycle – Child care</td>
<td>19 employees</td>
<td>2</td>
<td>2</td>
<td>Yes</td>
</tr>
<tr>
<td>Motorcycle Parking - Residential</td>
<td>235 spaces</td>
<td>6</td>
<td>12</td>
<td>Yes</td>
</tr>
<tr>
<td>Motorcycle Parking – Retail</td>
<td>N/A</td>
<td>0</td>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>Car Sharing</td>
<td>---</td>
<td>0</td>
<td>12</td>
<td>Yes</td>
</tr>
<tr>
<td>Retail</td>
<td>607</td>
<td>3</td>
<td>3</td>
<td>Yes</td>
</tr>
<tr>
<td>Child Care</td>
<td>660</td>
<td>4</td>
<td>4</td>
<td>Yes</td>
</tr>
</tbody>
</table>

From Table 5 it can be seen that the proposed parking provision for all modes complies with the DCP requirements and thus is considered satisfactory.
6.4 Access Assessment

The development includes an entry / exit driveway from O’Connor Street. The configuration and location of the proposed access driveway were subject to consultation with Mr Col Warne of Sydney City Council to confirm the arrangements were satisfactory in principle.

It was agreed between parties that the driveway should allow a Sydney City Council Garbage Truck to enter and leave the development whilst making use of the full width of the driveway. This acknowledges that servicing would generally occur outside peak traffic periods of the development. Further, that the full width of O’Connor Street should be assumed for use by the truck when entering and exiting.

Turning path analysis of a Sydney City Council Garbage Truck entering and exiting the site using AutoTURN are provided in Appendix B of this report. This analysis found that the proposed driveway design provides sufficient maneuvering width of a Sydney City Council Garbage Truck to enter and exit the basement ramp.

The site provides garbage truck access within the Basement Level 1. Further, that waste collection would be undertaken within the car park aisle at strategically located garbage rooms throughout Basement Level 1. The use of a car park aisle outside peak periods is commonplace.

Turning path analysis of a Sydney City Council Garbage Truck entering and exiting the basement level 1 are provided in Appendix C of this report. This analysis found the design includes sufficient manoeuvring area to allow the largest service to enter and exit the site in a forward direction.

The proposed driveway arrangements have been developed in consultation with Sydney City Council’s Manager of Traffic and has regard to the interface with the connection of Park Lane to O’Connor Street.

The design of the access arrangements is proposed to provide alternative pavement materials to standard asphalt and it intended to create a low speed laneway environment. The pedestrian connectivity between Wellington Street and O’Connor Street would be enhanced and not impacted upon whilst still providing suitable vehicular access arrangements to Block 11.

As stated above, on-street parking is proposed on the western side of Kensington Street immediately south of O’Connor Street. 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.

The allocation of on-street parking for visitors to the retail component (if required) is in line with the approach of the allocation of on-street throughout the Central Park precinct to provide short term parking for visitors of non-residential uses.
6.5 Car Park Design Compliance Assessment

It is proposed that 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.

General car parking spaces for tenants and visitors are proposed to be designed as a Class 1A car park facility as specified in the Australian Standard. That is, general car parking spaces would have dimensions 2.4m wide by 5.4m long with an aisle width of 5.8m. Accessible car spaces would also have dimensions of 2.4m wide by 5.4m long. An additional shared area for accessible spaces with the same dimensions would also be provided.

Turning path analysis of the main circulation ramp have been undertaken in accordance with the requirements of AS2890.1 and was found to be satisfactory. These turning paths can be found in Appendix D of this report.

6.6 Child Care Centre Parking Arrangements

It is proposed that the car park and associated drop off / pick up spaces are located on the western side of Kensington Street with direct all weather pedestrian access to the child care centre. This arrangement is in line with Sydney City Council recommended arrangements for child care centres and is considered satisfactory.

All parking areas have been reviewed for compliance with AS2890.1 and were found to be satisfactory.
7.0 WorkPlace / Green Travel Plan

7.1 What is a Green Travel Plan
Sydney City Council promotes the formulation of Green Travel Plans for new residential developments. Central Park has embraced the development of these plans for all new residents of the site as the site has developed.

A Green Travel Plan is a package of measures aimed at promoting sustainable travel and reducing reliance on the private car and encourage and support people’s aspirations for carrying out their daily business in a more sustainable way. Travel Plans can provide both:

- measures which restrict car use (disincentives or ‘sticks’); and
- measures which encourage or support sustainable travel, reduce the need to travel or make travelling more efficient (incentives or ‘carrots’).

7.2 Key Objectives
The aim of the Green Travel Plan is to bring about better transport arrangements for residents living on the site. The key objectives of the Travel Plan are:

- to encourage walking
- to encourage cycling
- to encourage the use of public transport
- to reduce the use of the car, in particular single car occupancy; and
- where it is necessary to use the car, encourage more efficient use.

7.3 Future of Sydney City Public Transport
The Sydney City Access Strategy and approval for the construction of the City and South East Light Rail Project will significantly change the public transport environment within and on the approaches to Sydney CBD.

Some key projects and initiatives include:

- Sydney Freight Strategy
- Sydney Kerbside Strategy
- Sydney Priority Routes Project
- New Sydney Bus Plan

Whilst it is desirable at this stage of the proposal to include all details of a Green Travel Plan, as much of the finer details of the new projects listed above have been made public it would be remiss so finalise a Green Travel Plan for the development.

At the time of writing this report it is anticipated that the Sydney Light Rail Project would commence early to mid 2015. Thus it is likely that the detailed information for the supporting projects, some of which have been described above, would be made publicly available.
It is not expected that the rail timetable and arrangements would change to any great degree following implementation of the projects to support the Sydney City Centre Access Strategy. Therefore it would be reasonable that rail information and walking routes to/from Central Station be included as part of the ongoing development of a Green Travel Plan.

7.4 Site Specific Measures
In line with the initiatives which have been implemented across the site for other blocks, the following would be undertaken:

- compliance with the stringent parking controls applicable to the site
- creation of street networks and associated footpaths and links to encourage cycling and walking
- provision of a Travel Access Guide for each new occupant. The finer details of this guide would be developed once information on changes to public transport operations in the CBD are made available.
- public transport information boards to make residents and visitors more aware of the alternative transport options available (the format of such information boards would be based upon the travel access guide)
- provision of free weekly/quarterly public transport tickets for the initial occupation of the dwellings so that residents will be encouraged to make public transport their modal choice from the day they occupy the property
- in accordance with NBN requirements, all properties will be provided with high quality telecommunication points which will provide residents with the opportunity to work from home thus reducing the need to travel
- provision of bicycle parking spaces both for residents and for visitors to the site; and
- a half yearly newsletter to be provided to every household for up to two years after occupation bringing the latest news on sustainable travel initiatives in the area.

The above would be made available for all new residents upon their arrival to the development.

7.5 Travel Access Guide
As stated above, it is recommended that a Travel Access Guide form a condition of consent for the Occupation Certificate (OC) application. It generally includes information on public transport operations on a mapped based arrangement and provided as part of a welcome pack.

It is considered that it is appropriate that any development consent is conditioned to ensure that a Travel Plan is implemented prior to occupation of the development.

An example of such a guide is provided in Appendix E of this report (developed for the Block 8 project).
8.0 Conclusions
This report has been prepared on behalf of Frasers Broadway Pty Ltd to assess the potential traffic impacts and parking needs of the proposed mixed use development known as Block 11 Central Park.

The findings of this investigation are presented below:

1. The proposal has the potential to generate some 64 peak hour trips two way would have minimal impact on the surrounding road network.
2. The potential traffic impacts of the development have been fully assessed in previous investigations by the Roads and Maritime Services and were found to be acceptable.
3. The parking provision complies with Sydney City Councils DCP 2012 and
4. Parking provision complies with Council’s DCP and is considered satisfactory
5. Parking provision for bicycles and motorcycles complies with Council’s DCP and is considered satisfactory
6. The development provides 10 car share spaces.
7. The design of the basement area can accommodate the expected largest vehicle to enter and exit the site in a forward direction.
8. The arrangements for access by waste collection vehicles comply with Council’s Waste DCP are considered satisfactory.
9. The finalisation of a suitable Green Travel Plan should occur at the time of the Occupation Certificate (OC) Application given the marked changes to public transport operations for the Sydney CBD earmarked over the next five years.

Overall the traffic impacts of the modified proposal are considered satisfactory.
Appendix A – Plans of Proposed Development
Appendix B – SSCGT Entering / Exiting Basement Turning Paths
Appendix C – SSCGT Accessing Basement Level 1
Appendix D – Circulation Ramp Turning Path Assessment
## Central Park Block 8 SSDA – Travel Access Guide

### Transport Services and Facilities

#### Train

<table>
<thead>
<tr>
<th>Suburban Line</th>
<th>Frequency – AM Peak</th>
<th>Frequency – PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>To City</td>
<td>From City</td>
<td>To City</td>
</tr>
<tr>
<td>Central Railway Station, located 500 metres away from the site, is one of the largest railway station and transport interchange in Australia. It serves all Sydney suburban, intercity, country and interstate trains except for the Cumberland Line and the regional Hunter Line.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Suburbs &amp; Illawarra Line</td>
<td>4 min</td>
<td>10 min</td>
</tr>
<tr>
<td>Bankstown Line</td>
<td>5 - 10 min</td>
<td>10 - 15 min</td>
</tr>
<tr>
<td>Airport Line</td>
<td>3 - 6 min</td>
<td>6 - 10 min</td>
</tr>
<tr>
<td>Inner West &amp; South Line</td>
<td>3 - 10 min</td>
<td>3 - 10 min</td>
</tr>
<tr>
<td>Western Line</td>
<td>3 - 7 min</td>
<td>5 - 10 min</td>
</tr>
<tr>
<td>Carlingford Line</td>
<td>30 - 40 min</td>
<td>45 - 60 min</td>
</tr>
<tr>
<td>North Shore / Northern Line</td>
<td>9 - 6 min</td>
<td>3 - 6 min</td>
</tr>
<tr>
<td>Intercity Line</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Coast</td>
<td>20 min</td>
<td>50 min</td>
</tr>
<tr>
<td>Southern Highlands</td>
<td>20 min</td>
<td>60 min</td>
</tr>
<tr>
<td>Blue Mountains</td>
<td>15 min</td>
<td>30 min</td>
</tr>
<tr>
<td>Central Coast &amp; Newcastle</td>
<td>6 - 10 min</td>
<td>30 min</td>
</tr>
</tbody>
</table>

#### Bus

<table>
<thead>
<tr>
<th>Route No.</th>
<th>Service Route</th>
<th>Frequency – AM Peak</th>
<th>Frequency – PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>M10</td>
<td>Leichhardt to Maroubra Jn</td>
<td>10 min</td>
<td>10 min</td>
</tr>
<tr>
<td>M39</td>
<td>Mosman to Sydneyham</td>
<td>10 min</td>
<td>10 min</td>
</tr>
<tr>
<td>352</td>
<td>Marrieville to Bondi</td>
<td>20 - 35 min</td>
<td>20 min</td>
</tr>
<tr>
<td>412</td>
<td>City to Campsie Station</td>
<td>20 min</td>
<td>15 min</td>
</tr>
<tr>
<td>413</td>
<td>City to Campsie Station</td>
<td>30 min</td>
<td>15 min</td>
</tr>
<tr>
<td>422</td>
<td>City to Kogarah</td>
<td>20 min</td>
<td>10 - 15 min</td>
</tr>
<tr>
<td>423/243</td>
<td>City to Kingsgrove</td>
<td>10 - 20 min</td>
<td>5 - 15 min</td>
</tr>
<tr>
<td>426</td>
<td>City to Dulwich Hill</td>
<td>20 min</td>
<td>5 - 10 min</td>
</tr>
<tr>
<td>428/242</td>
<td>City to Canterbury</td>
<td>20 min</td>
<td>5 - 10 min</td>
</tr>
<tr>
<td>431</td>
<td>Glebe Point to Millers Point</td>
<td>3 - 5 min</td>
<td>15 min</td>
</tr>
<tr>
<td>432</td>
<td>Balmain to Millers Point</td>
<td>10 - 15 min</td>
<td>15 min</td>
</tr>
<tr>
<td>436</td>
<td>City to Chiswick</td>
<td>20 min</td>
<td>15 min</td>
</tr>
<tr>
<td>438/240</td>
<td>City to Abbotsford</td>
<td>10 - 20 min</td>
<td>5 - 15 min</td>
</tr>
<tr>
<td>439/241</td>
<td>City to Mortlake</td>
<td>30 min</td>
<td>15 - 25 min</td>
</tr>
<tr>
<td>440</td>
<td>City to Rozelle</td>
<td>5 - 10 min</td>
<td>5 - 10 min</td>
</tr>
<tr>
<td>461</td>
<td>City to Burwood</td>
<td>5 - 20 min</td>
<td>10 - 15 min</td>
</tr>
<tr>
<td>470</td>
<td>City to Lityfield</td>
<td>15 min</td>
<td>5 min</td>
</tr>
<tr>
<td>480/483</td>
<td>City to Strathfield Station</td>
<td>20 min</td>
<td>5 - 10 min</td>
</tr>
</tbody>
</table>

#### Light Rail

Light Rail operates every 10-15 minutes on day time from Central Station to Lilyfield and Central Station to The Star. Services to Lilyfield finish at 11pm and overnight service is available from Central Station to The Star for every 30 minutes.

#### Wheelchair Accessible Buses

Wheelchair accessible buses operate on some routes. Contact Sydney Buses or the Transport Infoline for details.

#### The Closet Cycle Routes

The closet cycle routes run along Jones Street, Shepherd Street and Meaghe Street. The cycle routes are connected to Sydney CBD, inner west and eastern suburbs.

**Note:** See attached maps of *Existing Public Transport Nodes, Existing Bus Routes* and *Existing Cycle Network*.