

## 21.0 Traffic and Transport

The Masson Wilson Twiney (MWT) Transport Report assesses the traffic and transport aspects of the Concept Plan. It includes an assessment of the impact of the project on the local road network, proposed public transport measures and car parking requirements of the development. The key aspects of the assessment documented in the Transport Report are outlined below. The report in full is included at **Appendix M**.

### 21.1 Transport Issues

The concept plan includes some 88,809m<sup>2</sup> of commercial GFA and 144,348m<sup>2</sup> of residential GFA and 12,462m<sup>2</sup> of retail GFA. The floor space is indicative but represents a reasonable basis on which to estimate the likely traffic generation associated with the CUB project. These uses are likely to result in some 4,507 workers and 2,800 residents.

#### Traffic generation and local intersection operation

The report provides a methodology for the traffic generation rates used in the assessment, which were used to generate a Paramics model of the likely traffic impacts of the proposed development.

The report found that the development of the CUB site as proposed by the Concept Plan would result in existing intersections continuing to operate with a similar level of service. The report also concluded that all new signalised intersections proposed in the Concept Plan will operate with a good level of service.

Parking provision is based on the City of Sydney’s existing parking rates, as described in Section 13.0 of this report.

This generates approximately 2,068 spaces on site, of which 1,632 are for residents. In addition the Concept Plan includes a public car park (of some 250 spaces) proposed to be located at basement level in Block 5.

The report estimates the overall site traffic generation of 482 peak hour vehicle trips (in + out) in peak periods. A total site generation of some 482 additional vehicle trips in the peak hour does not represent a major increase in traffic flows on a Paramics network, with a total peak hour vehicle trips of more than 18,000. Traffic conditions on the major roads surrounding the site were therefore found to be similar to the base model. Existing intersections were found to maintain a good level of operation. See **Figure 14**.

**Table 14 – Existing Versus Future Intersection Performance**

| Location                         | Intersection Performance |                          |
|----------------------------------|--------------------------|--------------------------|
|                                  | Existing PM Peak         | Future PM Peak           |
|                                  | Delay (Level of Service) | Delay (Level of Service) |
| Broadway/Harris Street           | 45 (D)                   | 55                       |
| Braodway/Balfour Street          | N/A                      | 40(D)                    |
| Broadway/Abercombe Street        | 19(B)                    | 31(C)                    |
| Abercrombie Street/Irving Street | 10(A)                    | 13(A)                    |
| Blackfriars Street               | -                        | -                        |
| Kensington Street/Regent Street  | N/A                      | 24(B)                    |

## Access

Vehicular access to each development block is generally provided from the shared pedestrian/ vehicle lanes, namely Carlton Street and Chippen Lane, except for Blocks 9 and 11 which will be accessed from O'Connor Street. The access arrangements are described in drawings included in **Appendix A1**.

Provision is made for the majority of the site to be serviced off street at ground level service areas, which is considered best practice. Where this is not possible due to site constraints, servicing will be provided at basement level. All proposed intersections can accommodate a small rigid truck. All streets can accommodate the Sydney City Council's waste vehicles.

Access to and from all of the areas within the site to the external road network has been tested and demonstrated diagrammatically in the report and found to be satisfactory. Overall, the design of the proposed development was considered satisfactory from a transport and traffic perspective.

## Public transport

The MWT report confirms the site has access to a high level of existing public transport services and is also conveniently located within close range of a number of service, retail, employment and education facilities. The MWT report finds that the proposed development takes advantage of these opportunities to promote public transport use, walking and cycling in the area.

The Concept Plan will facilitate new direct pedestrian connections to rail and bus services at Central Station and Railway Square.

## Pedestrian connections and bicycle facilities

The CUB development provides for a number of new pedestrian connections to the surrounding local area. In particular, signalised pedestrian crossing facilities will be introduced across Abercrombie Street, Broadway and Regent Street. In addition, it is proposed to provide a safe and convenient crossing remote from the site at City Road to facilitate access between Chippendale and Victoria Park.

It is proposed to complement the Sydney City Bike Plan by the creation of a cycle route along Balfour Street through the Main Park to Wellington Street. Convenient and secure bicycle parking areas would be provided through out the site.

Individual buildings would be required to provide bicycle parking and shower facilities, consistent with current City of Sydney requirements and bike parking is proposed to be provided within the public domain.

## TMAP

The Masson Wilson Twiney Report includes a Transport Management and Accessibility Plan (TMAP) that seeks to encourage non car borne travel, improve access to public transport and provide safe walking and cycling conditions. The TMAP identifies the key elements to minimising car use are:

- Provision of a mix of land uses to encourage live/work arrangements;
- Maximising walking/cycling catchments; and
- Direct convenient access to public transport.

The Concept Plan for the CUB site provides the following measures to achieve these objectives:

- The high density development blocks are located in the north east sector of the site, which will minimise the average walking distance to and from public transport nodes;
- The proposed road network (with a new signalised crossing at Balfour Street and Broadway) provides a pedestrian spine that links bus services operating on both sides of the site;
- The proposed commercial/ retail/ residential land use mix will promote self containment in trip making and allow residents to shop, live and potentially work within the area and travel between these places on foot or by bicycle;
- New traffic signals on the surrounding arterials roads of Abercrombie Street, Broadway and Regent Street will take some car traffic away from the local, lower order roads and free these roads further for pedestrian and cyclist use;
- These intersections will also be provided with pedestrian crossing facilities;
- Direct cross site vehicular routes through the site have also been avoided to reduce the amount of through-traffic;
- Pedestrian facilities will be provided on both sides on most of the internal streets within the site, and on one side of the remaining streets;
- A shared pedestrian/ cycleway will be provided through the proposed park;
- The shared zone access/lanes will have cobbled or similar surface treatments and signage to reduce speeds to a maximum of 10Km/hr;
- The provision of bicycle facilities through the site has accounted for external linkages to existing and proposed bicycle routes in accordance with the Sydney City Council Bicycle Plan.

## Public Car Park

A public car park is proposed at basement level of Block 5. It is proposed to retain the existing public car park. It is proposed to include 250 spaces on the redeveloped site. The area the car park occupies is included as GFA. Approved plans dated 17 December 1980 note the basement car park had a GFA of 7,744m<sup>2</sup> including a total parking provision of 259 spaces. The nett impact is predicted to be neutral.