Proposed Residential Development

16-20 Smallwood Avenue, Homebush

TRAFFIC AND PARKING ASSESSMENT REPORT

18 February 2016

Ref 15664
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Document Verification

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1. **INTRODUCTION**

This report has been prepared to accompany a development application to Strathfield Council for a residential development proposal to be located at 16-20 Smallwood Avenue, Homebush (Figures 1 and 2).

The proposed development will involve the demolition of the three existing dwelling houses on the site to facilitate the construction of a new residential apartment building.

Car parking is to be provided in a two-level basement car parking area, in accordance with Council’s requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.
LOCATION
FIGURE 1
2. PROPOSED DEVELOPMENT

Site

The subject site is located on the eastern side of Smallwood Avenue, midway between Hudson Street and Loftus Crescent. The site has a street frontage of approximately 37 metres in length to Smallwood Avenue and occupies an area of approximately 2,208m$^2$.

The subject site is currently occupied by three dwelling houses, each with a respective vehicular access driveway to Smallwood Avenue.

Proposed Development

The proposed development will involve the demolition of the existing buildings on the site to facilitate the construction of a residential apartment building.

A total of 65 residential apartments are proposed in the new development as follows:

- 1 bedroom apartments: 26
- 2 bedroom apartments: 34
- 3 bedroom apartments: 5
- TOTAL DWELLINGS: 65

Off-street car parking is proposed for a total of 81 cars plus a car wash bay in a new two-level basement car parking area in accordance with Council’s requirements. Vehicular access to the car parking facilities is to be provided via a new entry/exit driveway located at the northern end of the Smallwood Avenue site frontage.

Garbage collection is expected to be undertaken by private waste contractors using small garbage trucks up to and including 6.4m long small rigid vehicles (SRV). A service bay is proposed to be located in the upper basement car parking area.

Plans of the proposed development have been prepared by *Urban Link Architecture* and are reproduced in the following pages.
3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

The M4 Motorway is classified by the RMS as a State Road and provides the key east-west road link in the area, which extends from Concord in Sydney’s inner west to Lapstone at the foothills of the Blue Mountains. It typically carries two traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. All intersections with the M4 Motorway are grade-separated.

Parramatta Road is also classified by the RMS as a State Road and provides another key east-west road link in the area, linking Sydney CBD and Granville. It typically carries three traffic lanes in each direction in the vicinity of the site, with Clearway restrictions applying along both sides of the road during commuter peak periods.

Centenary Drive and Homebush Bay Drive are also classified by the RMS as State Roads which provide the key north-south road link in the area, linking Rhodes and Greenacre. The route typically carries three traffic lanes in each direction in the vicinity of the site, with opposing traffic flows separated by a central median island. Clearway restrictions apply along both sides of the road during commuter peak periods.

Smallwood Avenue is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Kerbside parking is generally permitted along both sides of the road.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Parramatta Road
ROAD HIERARCHY

FIGURE 3
EXISTING TRAFFIC CONTROLS

FIGURE 4
- a 50 km/h SPEED LIMIT which applies to Smallwood Avenue and all other local roads in the area

- TRAFFIC SIGNALS in Parramatta Road where it intersects with Potts Street and also Bridge Road, with all turning movements permitted at both intersections

- a ROAD CLOSURE in Smallwood Avenue at its intersection with Dalton Avenue/Hudson Street which precludes through traffic to/from Parramatta Road.

**Projected Traffic Generation**

The traffic implications of the development proposal primarily concern the effects of the additional traffic flows generated as a result of the development and its impact on the operational performance of the adjacent road network.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002).*

The RMS Guidelines are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the development proposal:

**High Density Residential Flat Buildings in Sub-Regional Centres**

0.29 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the 65 dwellings outlined in the development proposal yields a traffic generation potential of approximately 19 vehicle trips per hour during commuter peak periods.

That projected future level of traffic generation potential should however, be offset or discounted by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the nett increase (or decrease) in traffic generation potential of the site.
Application of the *dwelling house* traffic generation rate nominated in the RMS *Guidelines* to the existing three dwelling houses on the site yields a traffic generation potential of approximately 3 peak hour vehicle trips.

Accordingly, it is likely that the proposed development will result in a *nett increase* in the traffic generation potential of the site of approximately 16 vph as set out below:

### Projected Nett Increase in Peak Hour Traffic Generation Potential of the site as a consequence of the development proposal

<table>
<thead>
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<th>Description</th>
<th>Value</th>
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<tr>
<td>Projected Future Traffic Generation Potential</td>
<td>18.9 vehicle trips</td>
</tr>
<tr>
<td>Less Existing Traffic Generation Potential</td>
<td>-2.6 vehicle trips</td>
</tr>
<tr>
<td><strong>NETT INCREASE IN TRAFFIC GENERATION POTENTIAL:</strong></td>
<td><strong>16.3 vehicle trips</strong></td>
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That projected increase in the traffic generation potential of the site as a consequence of the development proposal is minimal, consistent with the land zoning objectives of the subject site and will clearly not have any unacceptable traffic implications in terms of road network capacity.
4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

Given the residential nature of the local area there are generally no kerbside parking restrictions which apply along both sides of Smallwood Avenue including along the entire site frontage.

Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in Council’s Development Control Plan No.20 – Parramatta Road Corridor Area (2006), Section 2.13 – Vehicular Access and Car Parking document in the following terms:

<table>
<thead>
<tr>
<th>Residential Flat Buildings</th>
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<tbody>
<tr>
<td>1 bedroom dwelling:</td>
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<tr>
<td>2 bedroom dwelling:</td>
</tr>
<tr>
<td>3 bedroom dwelling:</td>
</tr>
<tr>
<td>Visitors</td>
</tr>
<tr>
<td>1 space per dwelling</td>
</tr>
<tr>
<td>1 space per dwelling</td>
</tr>
<tr>
<td>1.5 spaces per dwelling</td>
</tr>
<tr>
<td>1 space per 5 dwellings</td>
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DCP No.20 does not nominate an off-street car parking rate for residential townhouses. Therefore for the purpose of this assessment the car parking rate for 3 bedroom apartments has been adopted in respect of the townhouse component of the development proposal.

Application of the above traffic generation rates to the 62 dwellings outlined in the development proposal yields an off-street parking requirement of 77 spaces as set out below:

| Residential (65 dwellings): | 67.5 spaces |
| Visitors:                  | 13.0 spaces |
| **TOTAL:**                 | **80.5 spaces** |

The proposed development makes provision for a total of 81 off-street car parking spaces comprising 68 residential spaces and 13 visitor spaces plus a dedicated car wash bay, thereby satisfying Council’s car parking requirements.
The geometric design layout of the proposed car parking facilities have been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking* AS2890.1 and *Parking Facilities Part 6 - Off-Street Parking for People with Disabilities* AS2890.6 in respect of parking bay dimensions and aisle widths.

**Loading/Servicing Provisions**

The proposed residential apartment building is expected to be serviced by private waste contractors using small garbage trucks up to and including 6.4m long SRV trucks. The manoeuvring areas has been designed to accommodate the swept turning path requirements of these SRV trucks, allowing them to enter and exit the site in a forward direction at all times, as per the attached swept turning path diagrams.

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in both Council’s Parking Code as well as the Australian Standards and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.