

**PROJECT:**

Review of the parking supply and
demand associated with the
development of Lot 510, Joondalup
Ver. 2

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Lot 510 Traffic Study_v2.doc



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1. Introduction

1.1. Scope.

This study has been commissioned to investigate possible parking issues associated with the development of Lot 510, corner of Shenton Avenue and Davidson Terrace, Joondalup. The extent of the study includes a review of the existing parking demand within the immediate vicinity of the site and the likely parking requirements for the proposed development. Methodology relied on gathering baseline data of the surrounding public car parks adjacent to the proposed development and quantifying expected parking demand associated with the development.

1.2. Study site.

The study site shown on figure 1 is approximately 25 kilometres north of the Perth CBD and is located within the Joondalup Town Centre. The site is bound by Shenton Avenue to the north, Davidson Terrace to the west, Reid Promenade to the south and Lakeside Drive to the east.



Figure 1 Study site.

Lot 510 is currently vacant. The proposals for the site include the development of an office building, which when complete will provide for 3 office spaces on the ground floor and 4 office spaces per level one and level two. The ground floor will have a gross area of 720.6m², with a total net lettable office space of 558m². The first and second floors will have a gross area of 896m² each, with a total net lettable office space of 709m²/floor. The total net lettable office space for the building will be 1976m². The proposed layout is shown in Figure 2 and 3.

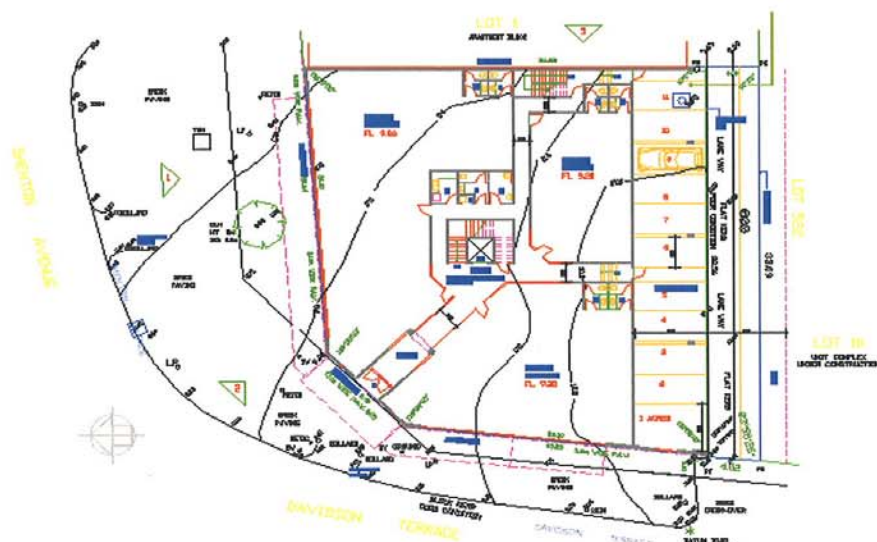


Figure 2 Proposed Development – Ground Floor

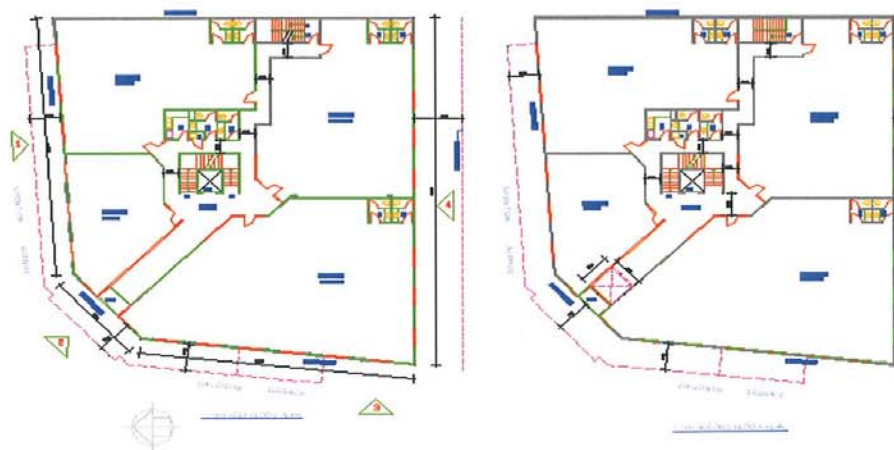


Figure 3 Proposed Development – First and Second Floor



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2. Existing traffic environment.

2.1. General.

Reid Promenade and Davidson Terrace are both classed as local access roads while Shenton Avenue is classified as a District Distributor (A) road and Lakeside Drive a District Distributor (B) road. Shenton Avenue provides access to the Joondalup Town Centre via Joondalup Drive which in turn connects to the Mitchell Freeway either by Hodges Drive or Ocean Reef Road. Shenton Avenue also provides connection to the western beach suburbs. Lakeside Drive provides connection to the eastern side of the town.

Shenton Avenue consists of a 4 lane dual carriageway separated by a landscaped median. Parking is not permitted on Shenton Avenue. Lakeside Drive consists of a 2 lane dual carriageway separated by a landscaped median, flanked with embayed on-road parking in the vicinity of the proposed development. Davidson Terrace and Reid Promenade are both 7.5 metres wide and incorporate embayed on-road parking bays.

2.2. Existing Parking

In order to identify available parking in the immediate vicinity of the proposed development site, the existing parking in the surrounding areas was surveyed over a number of periods during weekdays. The surveyed public parking in the immediate vicinity of the site is shown on Figure 4.



Figure 4 Existing onsite parking layout.

Table 1 below highlights the parking usage throughout the day and the survey results indicate that approximately 23 to 56 parking bays are available at various periods of the day with approximately 41 bays expected to be available around midday (23 bays in area b where excluded from the survey due to construction activities).



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Additional parking surveys have been undertaken on the 3rd and 4th of May at the request of the City of Joondalup with the results of these are provided in Table 2. It is to be noted that the bays set aside for construction use have recently been removed, resulting in the total number of bays available for public parking increasing from 79 to 102 within the immediate vicinity of the proposed development. Ten of these bays are short term on street parking bays located in Davidson Terrace with the remainder being unrestricted long term bays.

The results of the parking survey indicate that there are approximately 47 to 78 parking bays unoccupied during various periods of the day which are available for use by the general public or staff and customers of the proposed development.

Location	Description	Total Bays Available	Bays Available			
			1 st March 2006, 8:45AM	1 st March 2006, 5:00PM	2 nd March 2006, 8:45AM	2 nd March 2006, 12:30PM
A	Public On Street Parking - Shenton Avenue Westbound	15	8	3	9	13
B	Public Car Park - South East of Proposed Development	70 (23 Construction)	14	43	20	21
C*	Public Car Park - South East Corner	7	1	2	2	4
D**	Public On Street Parking - Davidson Terrace Southbound	4	0	3	0	1
E**	Public On Street Parking - Davidson Terrace Northbound	6	0	5	0	3
Total Bays Available		79	23	56	31	41
% Available Bays			29.1%	70.9%	39.2%	51.9%

*Includes Disabled Parking

**These bays are on street short term parking and are restricted to 1 hour.

Table 1 Parking Utilisation



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Location	Description	Total Bays Available	Bays Available			
			3rd May 2006, 11:30AM	3rd May 2006, 4:00PM	4th May 2006, 11:00AM	4th May 2006, 4:00PM
A	Public On Street Parking - Shenton Avenue Westbound	15	6	4	11	6
B	Public Car Park - South East of Proposed Development	70	37	58	43	63
C*	Public Car Park - South East Corner	7	1	2	1	2
D**	Public On Street Parking - Davidson Terrace Southbound	4	2	2	1	4
E**	Public On Street Parking - Davidson Terrace Northbound	6	1	3	5	3
Total Bays Available		102	47	69	61	78
% of Available Bays			46.00%	67.60%	59.80%	76.50%

*Includes Disabled Parking

**These bays are on street short term parking and are restricted to 1 hour.

Table 2 Parking Utilisation

2.3. Other Transport Use

The site is well serviced by train and bus facilities and the future users of a substantial portion of the building, McKinley Plowman & Associates have indicated that many of their staff are local residents and either cycle or walk to work.

The development will also be serviced by the Central Area Transport (CAT) system that currently operates throughout the Joondalup central business area.

3. Future Impacts.

3.1. Parking requirements.

Advice from the City of Joondalup indicates that based on their town planning requirements of 1 bay per 30m² net lettable area a total parking requirements of 65 bays is required. The proposed development provides a total of 11 bays on site.

The RTA Guide to Traffic Generating Developments, and the ITE Generation Guide, indicates that parking needs for office developments may be calculated using a rate of 1 bay per 40 m² GFA. These rates have been developed out of survey data of actual demand for a variety of land uses and are an accepted source for traffic assessments associated with property development



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throughout Australia. Table 3 below highlights the variation between the parking requirements based on the RTA parking rates.

Occupancy	Rate	Quantity	Requirement
Office space	1 per 40 m ² GFA.	2512.6m ²	62.8 bays
	1 per net lettable area	1976m ²	65.86

Table 3 Parking requirements.

Utilising the RTA rates, a shortfall of 52 bays needs to be accommodated elsewhere for the development to meet projected parking demand.

4. Conclusions.

Assessment of the likely demand for parking and available onsite space highlights a shortfall of approximately 52 bays utilising demand rates from the RTA Guide to Traffic Generating Developments.

A survey of the current parking demand indicates that the public parking within the immediate vicinity of the proposed development that is available for use by staff and customers is generally between 47 and 61 bays, of which approximately 3 are short term on street parking with the remainder being long term.

While it is difficult to predict likely reciprocal use levels for the proposed development, it is clear that there is already a significant excess of available parking in the immediate vicinity of the proposed development. Given this substantial parking availability, an additional 52 bays not only makes the development of the site financially unfeasible but will result in the further waste of valuable space and economic resources.

Given the excellent transport alternatives that service the proposed development site and the local nature of employment it is considered not unreasonable to reduce the parking requirements by a factor of 50%. This reduction would still provide reasonable numbers of available parking bays to cater for periods of peak demand in the immediate vicinity of the proposed development.