

Proposed Redevelopment of Queanbeyan District Hospital

Cnr Erin Street & Collett Street, Queanbeyan

TRAFFIC AND PARKING ASSESSMENT REPORT

18 May 2006

Ref 06069

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants 

Suite 6, 20 Young Street, Neutral Bay NSW 2089 - PO Box 1868, Neutral Bay NSW 2089
Ph: 9904 3224 Fax: 9904 3228, Email: varga@vtp.net.au

TABLE OF CONTENTS

1. INTRODUCTION 1

2. PROPOSED DEVELOPMENT 4

3. PARKING ASSESSMENT 7

4. TRAFFIC ASSESSMENT 11

LIST OF ILLUSTRATIONS

Figure 1 Location

Figure 2 Site

1. INTRODUCTION

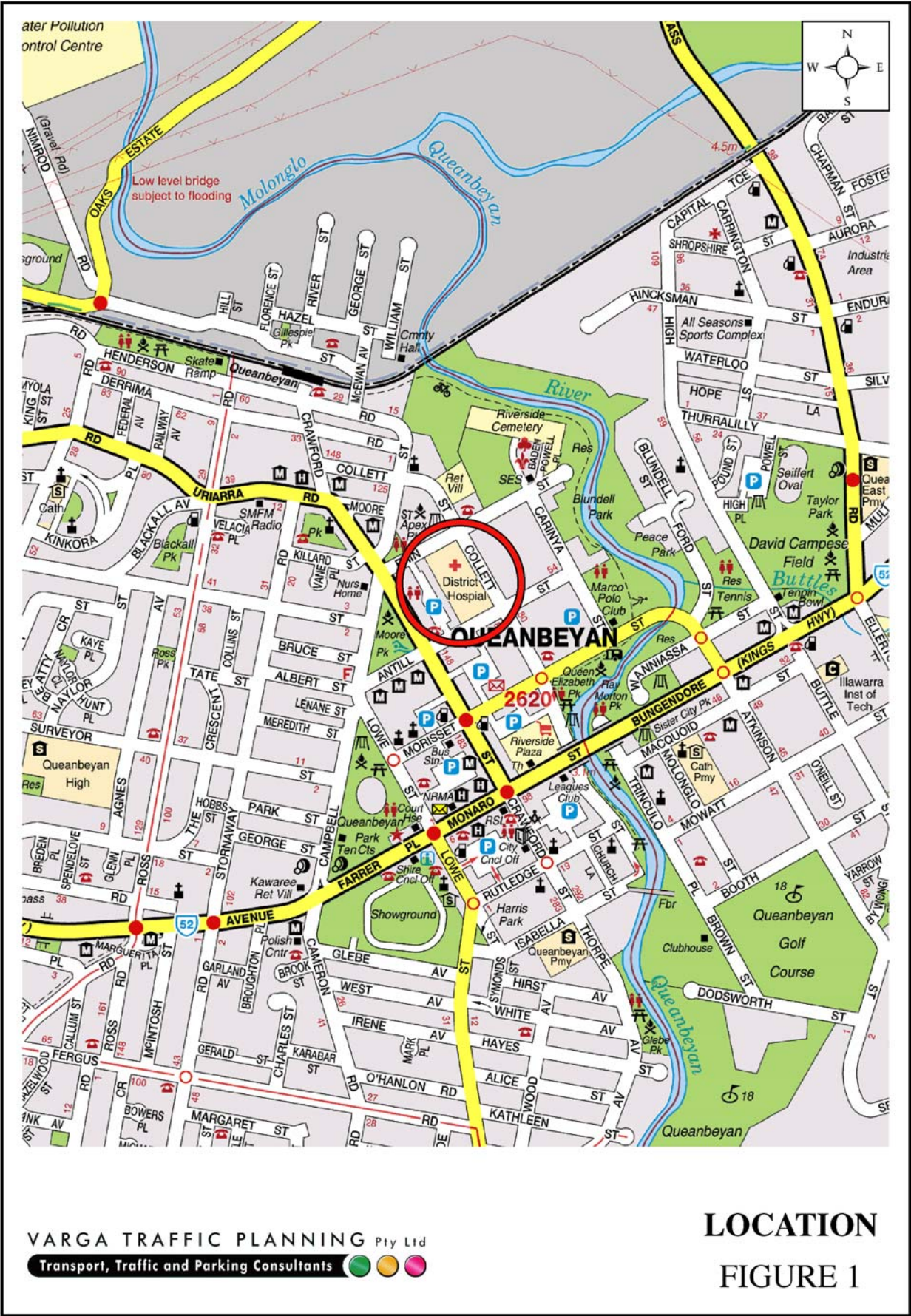
This report has been prepared to accompany a Development Application to Queanbeyan City Council for alterations and additions proposed at the Queanbeyan District Hospital which is located on the corner of Erin Street and Collett Street, Queanbeyan (Figures 1 and 2).

The proposed development will involve the demolition of a number of existing buildings on the site to facilitate the construction of a new hospital building near the Erin Street and Collett Street corner of the site. The proposed development will also involve the refurbishment of another building on the site. The building to be refurbished is centrally located on the site, to the south-west of the proposed new building.

It is anticipated that the proposed development is to be undertaken in stages to enable the day-to-day operations of the hospital to continue without disruption during construction.

The purpose of this report is to review the traffic and parking implications of the proposed redevelopment to be undertaken on the hospital site and to that end this report:

- describes the site and provides details of the development proposal
- reviews the road network in the immediate vicinity of the site, and the traffic and parking controls which apply to that road network
- assesses the adequacy and suitability of the off-street carparking facilities incorporated in the development proposal
- assesses the traffic implications of the proposed redevelopment in terms of road network capacity.





2. PROPOSED DEVELOPMENT

Site

The Queanbeyan District Hospital is located on the corner of Erin Street and Collett Street, and has street frontages approximately 125m in length to Erin Street, 201m in length to Collett Street, and 125m in length to Antill Street. The total site area is 24,912m².

The existing hospital comprises a number of separate buildings and associated carparking areas which have been developed over a period of many years.

The patient services at Queanbeyan District Hospital include inpatient medical, mental health, emergency and diagnostic imaging services. Key existing facilities include a 44 bed ward and 2 operating theatres. Patient services are provided by general practitioner visiting medical officers and nursing staff, supported by pathology, pharmacy, administration, maintenance and community health services.

Off-street carparking is currently provided on the site for a total of 129 cars. The carparking is distributed at various locations throughout the site, and includes both formal and informal parking arrangements. The 5 largest carparking areas on the site have capacities which are typically in the order of 12 to 23 spaces each.

Vehicular access to the site is currently provided via various driveways which are located on all three street frontages of the site. Those existing driveways are to be retained, largely in their present configurations.

Proposed Development

The Greater Southern Area Health Service and the NSW Department of Health have identified a need to co-locate and integrate the medical services provided in the Queanbeyan area into 1 site at Queanbeyan District Hospital.

To facilitate that objective, it is proposed to construct a new hospital building on the north-western corner of the hospital site, and to refurbish another building which is centrally located within the site.

The proposed development will require the demolition of a number of existing buildings on the site, and the reconfiguration of some of the internal vehicular access, carparking and servicing arrangements. Key features of the proposed vehicular access and carparking arrangements are as follows:

- an increase in the number of carparking spaces provided on the site for 129 existing carparking spaces to a total of 166 carparking spaces to be provided in the future
- the provision of a new patient drop-off facility at the main entrance to the new building. The proposed new drop-off facility will provide protection for patients from increment weather
- the provision of a new ambulance facility which may be accessed directly via the main entrance off Collet Street or from the existing ambulance station which is located in Erin Street, near the north-western corner of the site.

General patient/visitor traffic in and out of the site is to be catered for by the main vehicular entrance which is to be provided in Collet Street. The main vehicular entrance will provide direct access to both the main carparking area and the patient drop-off facility, without the need for visitors or patients to traverse the remainder of the hospital site.

The proposed arrangements will ensure that emergency vehicle access is maintained throughout the site at all times. The level of traffic activity expected to occur in the vicinity of the carpark entrance, the drop-off area and the new ambulance facility will be minimal at all times, and will not result in any congestion or delays to vehicles accessing the site. In particular, the movement of emergency vehicles in this area will not be impeded in any way under normal traffic conditions.

Plans of the redevelopment proposal have been prepared by *Health Science Planning Consultants Pty Ltd, Principal Design Consultants* and are reproduced in the following pages.

3. PARKING ASSESSMENT

Existing Parking Facilities

As noted in the foregoing, there are a total of 129 carparking spaces provided on the Queanbeyan District Hospital site at present. A survey of carparking accumulations conducted on the hospital site on a typical weekday between 7am-6pm has revealed that substantial spare carparking capacity remains readily available on the hospital site. The results of the hospital surveys are summarised in Table 3.1 below, revealing that:

- there was an average of 59.3 vacant parking spaces available on the hospital site throughout the day
- the peak parking demands on the hospital site occurred at around 2pm, when a total of 47 vacant parking spaces remained available on the hospital site
- the lowest parking demands recorded by the parking accumulation surveys occurred at around 5.30pm, when there were a total of 75 vacant parking spaces available on the hospital site.

**TABLE 3.1 - QUEANBEYAN DISTRICT HOSPITAL
OFF-STREET PARKING ACCUMULATION SURVEY RESULTS
(TOTAL EXISTING PARKING CAPACITY 129 SPACES)
NUMBER OF VACANT PARKING SPACES AVAILABLE**

AM										PM												
7	7.30	8	8.30	9	9.30	10	10.30	11	11.30	12	12.30	1	1.30	2	2.30	3	3.30	4	4.30	5	5.30	6
131	118	103	95	78	77	71	75	72	66	71	86	82	76	70	75	71	84	84	83	98	91	97

In addition to the on-street carparking available on the hospital site, substantial spare carparking capacity also remains available in kerbside parking areas located in the immediate vicinity of the hospital site. An indication of the availability of kerbside parking in the vicinity of the hospital site is provided by parking accumulation surveys conducted in Erin Street (between Crawford Street and a point midway between Collett Street and Carinya Street) and in Collett Street between Antill Street and a point midway between Erin Street and Campbell Street.

The capacity of the kerbside carparking areas located in the immediate vicinity of the hospital site is 138 carparking spaces. The results of the on-street parking accumulation surveys are summarised in Table 3.2 below, revealing that:

- there were an average of 84.9 vacant carparking spaces available in kerbside parking areas located in the immediate vicinity of the hospital site
- the peak parking demands occurred at 11.30am, when a total of 66 vacant parking spaces were recorded near the hospital
- the lowest parking demands occurred at 7.30am, when a total of 131 vacant parking spaces were recorded in kerbside parking areas located in the immediate vicinity of the hospital site.

**TABLE 3.2 - QUEANBEYAN DISTRICT HOSPITAL
ON-STREET PARKING ACCUMULATION SURVEY RESULTS
(TOTAL EXISTING PARKING CAPACITY 138 SPACES)
NUMBER OF VACANT PARKING SPACES AVAILABLE**

AM										PM												
7	7.30	8	8.30	9	9.30	10	10.30	11	11.30	12	12.30	1	1.30	2	2.30	3	3.30	4	4.30	5	5.30	6
66	69	63	61	53	51	57	59	57	57	55	56	53	49	47	51	54	62	63	65	71	75	72

In summary, the parking accumulation surveys reveal that *abundant* spare carparking capacity is readily available in on and off-street carparking areas located in and around the hospital site, with an average of more than 140 vacant carparking spaces being identified by the parking surveys.

An indication of the parking demands generated by the existing hospital facilities (based on an off-street carparking) is provided by reference to surveys undertaken by TEF Consulting¹. The surveys involved on-site inspections and a questionnaire distributed to staff and patients, and reveal that:

- approximately 90% of staff drive a car to the hospital, whilst a further 5% travel as car passengers or are dropped-off, and that the remaining 5% walk or cycle to the hospital

¹ TEF Consulting Pty Ltd "An Assessment of the Potential Traffic and Parking Impacts of the Proposed Redevelopment of Queanbeyan District Hospital" 28 January 2005.

- the peak parking demands generated by the existing facilities on the site is 185 spaces, comprising 163 staff and hospital-related vehicles, and a further 22 patients/visitors vehicles
- staff and visitors to the hospital tend to park in the most convenient locations available at the time of their arrival, and
- ample spare carparking capacity is readily available both on-site and on-street in Erin Street and in Collett Street.

Proposed Off-Street Parking Provisions

Neither Queanbeyan City Council nor the RTA *Guidelines* nominate any off-street carparking requirements or rates for hospitals and accordingly, reference is made to the surveys conducted at the existing hospital to determine the increase parking demands likely to occur as a consequence of the proposed development.

As noted in the foregoing, the surveys conducted at the existing hospital indicate that the current parking demands generated by the hospital are in the order of 185 spaces. Extrapolation of those survey results to the additional facilities proposed as part of the redevelopment of the hospital indicates that the peak parking demand of the expanded hospital facilities will be in the order of 272 spaces, as set out in Table 3.3 below.

TABLE 3.3 - QUEANBEYAN DISTRICT HOSPITAL EXISTING AND PROJECTED FUTURE PARKING DEMANDS			
	EXISTING	PROJECTED	NETT INCREASE
Staff	163	194	+31
SAHS	0	52	+52
Patients & Visitors	22	26	+4
TOTAL	185	272	+87

Source: TEF Consulting

Those projected future parking demands of 87 additional carparking spaces will be comfortably satisfied by the proposed increase in the amount of carparking to be provided on the site to 166 spaces, noting also that:

- surveys of on-site carparking have shown that the parking facilities on the hospital site are underutilised at present, with an average of 60 vacant parking spaces remaining available on the hospital site at present
- on-street kerbside parking is also underutilised, with an average of 85 vacant parking spaces being available in kerbside parking areas located in the immediate vicinity of the site.

The geometric design layout of the proposed off-street carparking facilities have been designed to comply with the relevant aspects of the Standards Australia publication's *Parking Facilities Part 1: Off-Street Car Parking AS2890.1 - 2004* in terms of parking bay dimensions, aisle widths and gradients (to be checked).

In the circumstances, it is clear that the proposed development will not have any unacceptable parking implications.

Servicing/Deliveries

The servicing/delivery needs of the hospital comprise linen deliveries, waste services, various food deliveries and couriers. The majority of these deliveries are undertaken by medium to large sized trucks. Two deliveries per month are made by semi-trailer. There are typically in the order of 4 to 5 service vehicle trips made to the hospital each day. It would be rare for more than 1 delivery/service vehicle to be present on the site at any given point in time.

The proposed development retains the existing loading dock which makes provision for 2 to 3 delivery vehicles to be accommodated on the site simultaneously, including a semi-trailer. The servicing/delivery facilities have been designed to enable all delivery/service vehicles to enter and exit the site whilst travelling in a forward direction at all times.

In the circumstances, it is concluded that the proposed development will not have any unacceptable servicing/delivery implications.

4. TRAFFIC ASSESSMENT

The existing traffic controls which apply to the adjacent road work include the following:

- a 60 km/h SPEED LIMIT which applies throughout the area
- GIVE-WAY signs in Erin Street where it intersects with Crawford Street and with Collett Street
- GIVE-WAY signs in Antill Street where it intersects with Collett Street and with Antill Street
- channelised intersections in Crawford Street where it intersects with Antill Street and with Erin Street, with all turning movements permitted.

On-site observations and discussions with Council's traffic officers have confirmed that traffic activity on the road network adjacent to the hospital is minimal.

Projected Additional Traffic Flows

The additional traffic flows expected to be generated by the new facilities to be incorporated in the Queanbeyan District Hospital will comprise additional staff and patient/visitor movements associated with the expansion proposal. As noted in the foregoing, those additional facilities are expected to generate an increase in parking demands of approximately 87 cars, comprising approximately 83 staff and approximately 4 patients/visitors.

If it is assumed that all of the additional staff and patients travel to/from the hospital within a one hour period (eg. at a shift change), the maximum additional traffic flows likely to be generated by the hospital site as a consequence of the proposed redevelopment will be in the order of 80-90 additional vehicle movements per hour.

Those projected increase in traffic flows of 80-90 additional vehicle movements per hour are minimal and will clearly not have any unacceptable traffic implications in terms of road network capacity.

In the circumstances, it is reasonable to conclude that the proposed development will not have any unacceptable traffic implications.