



**TRAFFIC AND PARKING IMPACTS REPORT
FOR A DEVELOPMENT APPLICATION
FOR A PROPOSED PERFORMING ARTS CENTRE
AT NO. 163 AUBURN STREET, GOULBURN NSW 2580**

Property address	163 Auburn Street, Goulburn NSW 2580
Client	Brewster Hjorth Architects
Prepared by	O. Sannikov, MEngSc (Traffic Engineering), MIEAust, PEng, MAITPM
Date	04/11/2016
Job No.	16088
Report No.	16088 01

Item	Report
Site location	<ul style="list-style-type: none">• Refer to Figure 1.
Existing land use	<ul style="list-style-type: none">• Zone B3 – Commercial Core• Community centre<ul style="list-style-type: none">◦ Youth services◦ Seniors activities club
Proposed development	<ul style="list-style-type: none">• Original building<ul style="list-style-type: none">◦ Reconfigure to incorporate entrance foyer, box office, cafe and studio/office facilities• Performing arts centre<ul style="list-style-type: none">◦ Behind original building◦ 420 seat capacity◦ Theatre includes flexible seating modes, raised stage, orchestra pit, fly tower, wing areas, storage and performance changing rooms

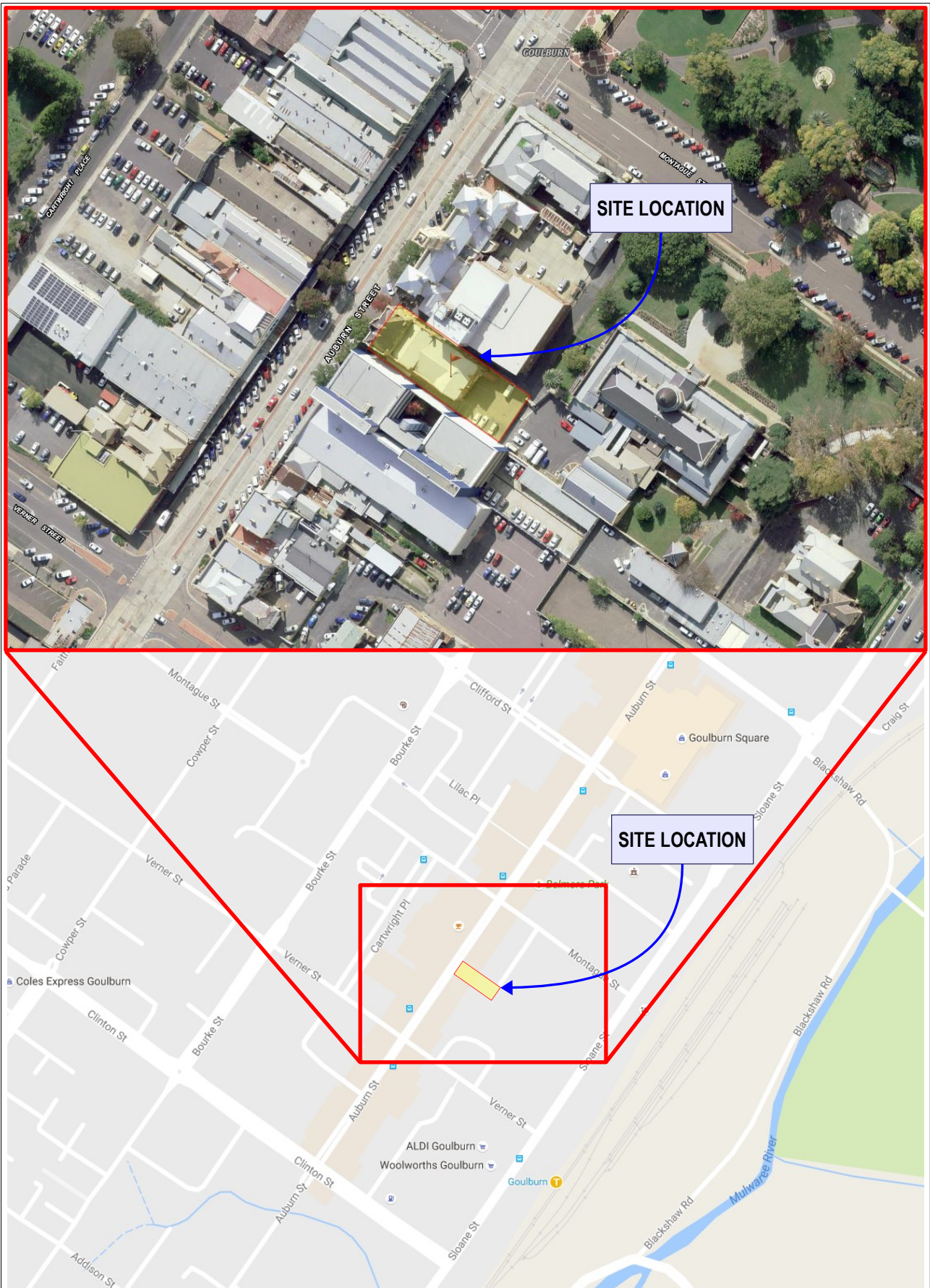


Figure 1. Site location.

Item	Report
Street characteristics	<p>Existing traffic and parking situation</p>
	<ul style="list-style-type: none"> • Refer to Figure 2. • The main roads around the proposed development are described below. <ul style="list-style-type: none"> ○ Auburn Street <ul style="list-style-type: none"> ▪ State Road (MR676) ▪ Speed limit is 50 km/h ▪ Two travel lanes and two parking lanes <ul style="list-style-type: none"> • 1P parking restrictions ▪ Separated by a median strip ○ Montague Street <ul style="list-style-type: none"> ▪ Local road ▪ Two travel lanes and two parking lanes ○ Verner Street <ul style="list-style-type: none"> ▪ Local collector road ▪ Two travel lanes and two parking lanes ○ Other streets in the surrounding area are local/local collector roads. Street conditions are typical for a residential/commercial area, with low to moderate traffic volumes. <ul style="list-style-type: none"> ▪ General speed limit is 50 km/h on local streets around the site.
Train	<p>Public Transport</p> <ul style="list-style-type: none"> • Refer to Figure 3. • The nearest train station is Goulburn Station which is located approximately 400 m from the site location (within the standard catchment area of 800 m radius for train stations). <ul style="list-style-type: none"> ○ Services the Southern Highlands Line ○ 4 services throughout the entire day in each direction • Due to the lack of train services, NSW Trainlink operates additional buses <ul style="list-style-type: none"> ○ These services include SH100 and 855

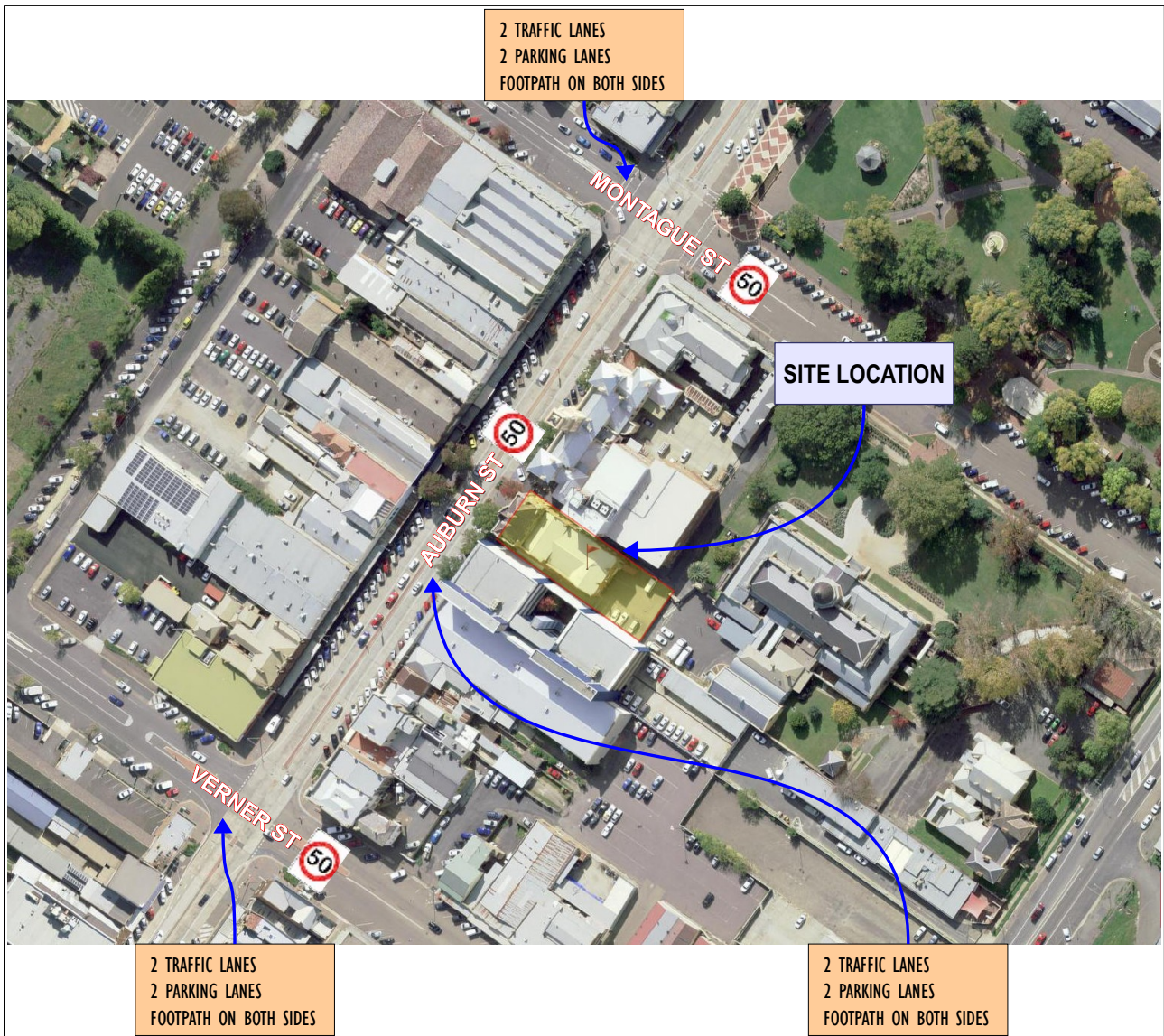


Figure 2. Street characteristics.

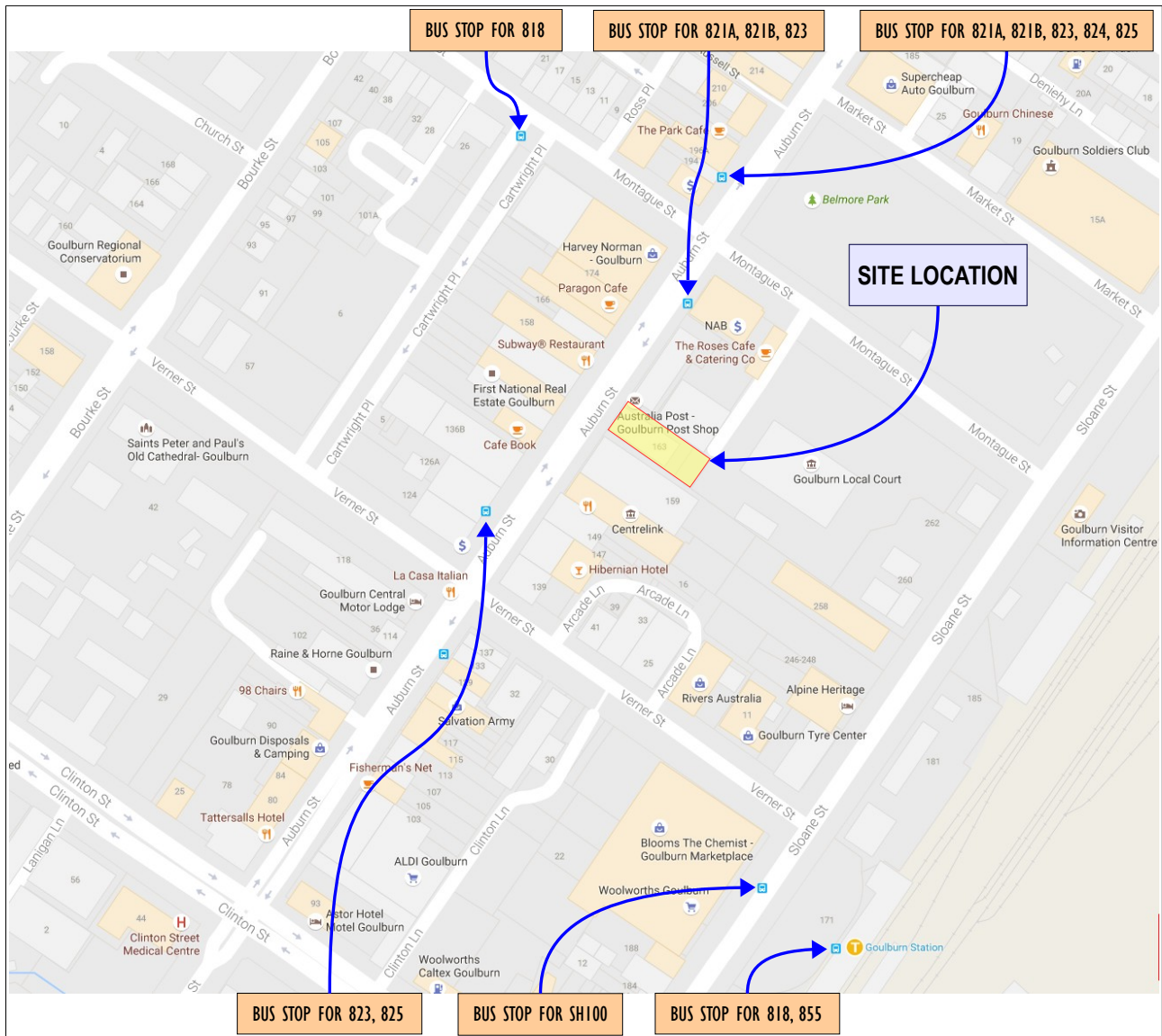


Figure 3. Public transport.

Item	Report
Bus	<ul style="list-style-type: none"> • There are bus stops within walking distance, approximately 100 m from the site location along Auburn Street. <ul style="list-style-type: none"> ○ Bus Route SH100 (train service replacement) <ul style="list-style-type: none"> ▪ Goulburn to Moss Vale <ul style="list-style-type: none"> • There is 1 service throughout the day ▪ Moss Vale to Goulburn <ul style="list-style-type: none"> • There is 1 service throughout the day ○ Bus Route 855 (train service replacement) <ul style="list-style-type: none"> ▪ Goulburn to Wollongong <ul style="list-style-type: none"> • There is 1 service throughout the day ▪ Wollongong to Goulburn <ul style="list-style-type: none"> • There is 1 service throughout the day ○ Bus Route 818 <ul style="list-style-type: none"> ▪ Goulburn to Crookwell <ul style="list-style-type: none"> • There are 2 services throughout the day ▪ Crookwell to Goulburn <ul style="list-style-type: none"> • There are 2 services throughout the day ○ Bus Route 821A (loop service) <ul style="list-style-type: none"> ▪ Goulburn to Kenmore Morning Loop <ul style="list-style-type: none"> • There are two services during the AM peak • Does not operate in the PM peak ○ Bus Route 821B (loop service) <ul style="list-style-type: none"> ▪ Goulburn to Kenmore Afternoon Loop <ul style="list-style-type: none"> • Does not operate in the AM peak • There are two services during the PM peak ○ Bus Route 823 (loop service) <ul style="list-style-type: none"> ▪ Goulburn to West Goulburn Loop <ul style="list-style-type: none"> • There are two services during the AM peak • There are two services during the PM peak ○ Bus Route 825 <ul style="list-style-type: none"> ▪ Goulburn to Eastgrove Loop <ul style="list-style-type: none"> • There are 3 services throughout the day ○ Bus Route 855 (train service replacement) <ul style="list-style-type: none"> ▪ Chatswood to City – King Street Wharf via Longueville <ul style="list-style-type: none"> • Services operate every 20-30 minutes during the AM peak • Services operate every 30 minutes during the PM peak ▪ City – King Street Wharf to Chatswood via Longueville <ul style="list-style-type: none"> • There are four services during the AM peak • Services operate every 20-30 minutes during the PM peak

Item	Report
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Planning control document

- Goulburn Mulwaree Council
 - Goulburn Mulwaree Development Control Plan (DCP) 2009

Requirement	Compliance
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Section 3.4 – Vehicle Access and Parking

3.4.2 Specific land use requirements

Off-street parking shall be calculated in accordance with Table 3-2 or you may take the option of undertaking a traffic impact and parking study. Sufficiently complies.

Places of assembly	
Halls, meeting places, churches, convention centres, cinemas, community facilities	1 space per 10 seats; or 1 space per 10m ² of space used by the public, whichever is the greater (Note: Total parking provision may be reduced where it can be demonstrated that the time of peak demand for parking associated with locality does not coincide). Cinema complex may require a parking study.

Car parking required: 420 (seats) / 10 = 42 car spaces OR 1 x 560/10 (m ²) = 56 car spaces	Car parking provided: No car parking provided
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However it is noted that the peak period of the performing arts centre will occur outside business and retail hours. Commercial developments account for approximately 90% of the surrounding area.

Surrounding areas such as Montague Street, Verner Street and Huntly Arcade rear car park will also have low parking occupancy.

There are more than 600 public car parking spaces within walking distance from the site, which is considered to be within a 2 block radius (up to 400 metres walking distance). Refer to **Figure 4**.

It is expected that the many off-street car parking spaces dedicated to local shops will have low parking occupancy outside normal business/retail peak hours.

The majority of the shops in the area close after 5:30 p.m.

Time restrictions for on street parking also end after 6:00 p.m. which is consistent with low parking demand for retail and commercial after these times and hence no need to manage parking turnover.

A limited video survey showed 25% to 50% parking vacancy rates on the surrounding streets. The survey was conducted between 3:00 p.m. and 4:00 p.m. on Friday 10th of November 2016.

The large amount of existing on street public car parking will easily accommodate the needs of the proposed arts centre without undue impacts on the public amenity.

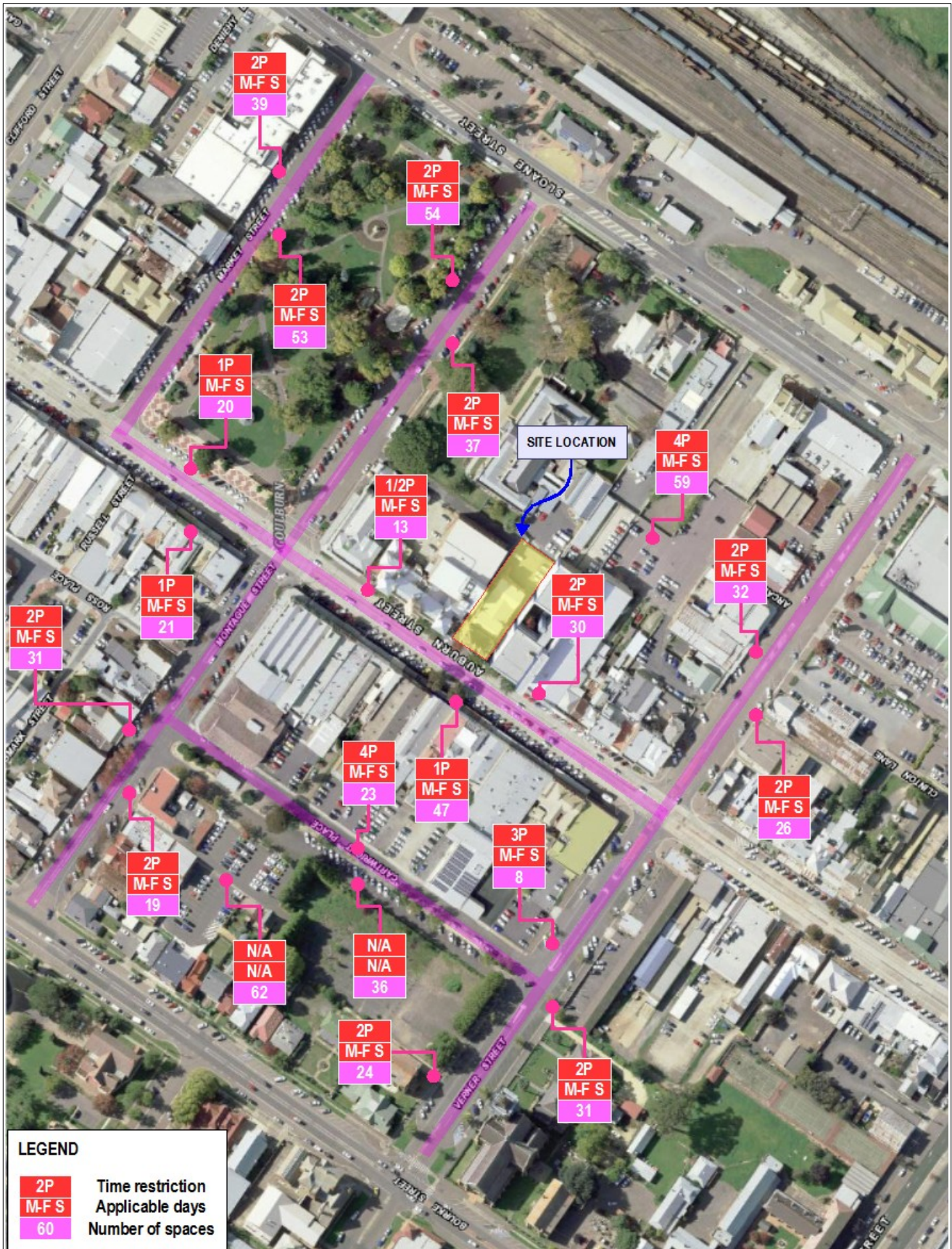
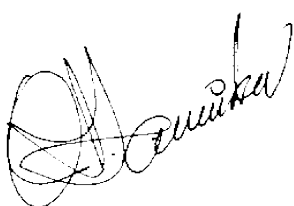


Figure 4. Public car parking within walking distance.

Item	Report
Traffic generation	Traffic impacts
	<ul style="list-style-type: none"> • Worst case scenario (assuming maximum capacity) – 420 visitors all arriving within one hour <ul style="list-style-type: none"> ◦ Assumptions: <ul style="list-style-type: none"> ▪ 80% of visitors arrive by car – 336 visitors by car ▪ Car occupancy 2 persons per car – 168 cars
	<ul style="list-style-type: none"> • Distributed equally across 6 intersection approaches (2 block walking distance) – 28 vehicle movements per approach <ul style="list-style-type: none"> ◦ Approaches: Auburn St (north and south approach), Montague St (east and west approach) and Clifford St (east and west approach) ◦ The peak centre activity will most likely occur outside commuter peak hours
Conclusion	<ul style="list-style-type: none"> • The increase in traffic will have negligible impacts on existing road operation. • Traffic distribution <ul style="list-style-type: none"> ◦ Trip generation and attraction is assumed to be equal in all directions, with trip distribution taking into account street network connections and turn restrictions.

Conclusions

- Proposed parking provision
 - Council's Development Control Plan requires 42 car parking spaces.
 - The proposal does not provide any off-street parking.
 - This is considered to be satisfactory due to:
 - Infrequent and short term parking demand
 - Typical peak parking demand times being outside normal business and retail hours.
 - Abundance of on-street public parking with sufficient vacancy rates.
- Traffic impacts
 - The additional traffic from the proposed development will have no negative impacts on street network operation.
- The proposed development is supportable on traffic and parking grounds.



Oleg I. Sannikov

Director

MEngSc (Traffic Engineering)

MIEAust, PEng

MAITPM

References:

Goulburn Mulwaree Development Control Plan 2009
Guide to Traffic Generating Developments RMS (2002)