

LETTER

Transport Engineering

REF: N178200

DATE: 2 September 2020

Nasscon Pty Ltd
1 Australia Street
HURSTVILLE NSW 2220

Attention: Mr. Amin Nasser

Dear Amin,

RE: 88-92 BOTANY STREET, CARLTON – RESPONSE TO COUNCIL RFI

A development application (DA) has been submitted for a proposed place of worship on land at 88-92 Botany Street, Carlton. The proposed development covers a site area of 1,985 square metres and has frontages to Botany Street, Xenia Avenue and Ethel Lane. The existing building on 88-90 Botany Street will be reconfigured and largely maintained, with an at-grade car park proposed on 92 Botany Street to facilitate a total of 22 on-site parking spaces. GTA Consultants (GTA) completed a transport assessment¹ to support the DA.

Subsequent to the DA being lodged, Georges River Council (Council) has requested additional information in relation to several traffic and parking aspects. This letter has been prepared to specifically provide a response to submissions in this regard. The relevant submissions from Council have been reproduced below together with detailed responses.

Council Comment 1: Submission of an amended traffic report is recommended which provides further statistical justification/evidence to enable Council to make a full and proper assessment of the proposal:

- *Additional on-street parking counts to be undertaken relating to the evening prayer session times (sunset – 10:00pm) – a minimum of 3 counts is required.*
- *Additional lunchtime parking counts to be undertaken relating to lunchtime prayer sessions (12:00pm – 2:30pm) – a minimum of 3 counts is required.*

Council Comment 2: The additional traffic counts are to be undertaken on a number of different days of the week to ensure there is adequate evidence to demonstrate there is sufficient on street parking available within the precinct to cater for 'special' events whereby there will be up to 120 worshippers within the place of public worship. This information is required to demonstrate this precinct accommodate the demand required during these 'special' event periods.

GTA Response:

Additional on-street parking counts have been completed over three days covering Friday 31 July, Wednesday 5 August and Thursday 6 August 2020. An overview of the survey results is described below with Table 2 and Table 3, and Figure 1 and Figure 2 illustrating the results.

When combined with the previous on-street parking counts completed in 2019, there is now thorough parking data to definitively understand the relative impacts of the proposed place of worship. This data

¹ 88-92 Botany Street, Carlton, Place of Worship, Transport Impact Assessment, 13 March 2020.

also covers the lunchtime prayer sessions (12:00pm to 2:30pm) and evening sessions (4:00pm to 10:00pm). The parking surveys covered the same areas as those documented in the DA report.

When considering demand on Botany Street and Ethel Street only (excluding Xenia Avenue and Fleet Street), there are between 60 and 90 vacant spaces during the peak 12pm to 2pm period out of a total supply of about 160 spaces. The overall peak demand is around 3pm, coinciding with the school pick-up period with a peak of 115 vehicles on the Thursday. Demand on all other survey days did not exceed 85 to 95 vehicles.

The combined parking surveys clearly shows there is adequate capacity in the study area (~~and~~ Botany Street and Ethel Street in isolation) to accommodate the minor additional parking demands associated with the proposed place of worship and for all prayer sessions including dawn, midday, afternoon, sunset and evenings. Uncertainty surrounds the 'spike' in demand on the Thursday at 3pm however it is likely associated with school pick-up activity and unique to that day and related current COVID-19 circumstances. In any event, this isolated peak does not coincide with activity at the proposed place of worship, nor does it occur on Fridays, at a time when the place of worship is anticipated to have its highest activity. An increase in demand is expected for Friday communal where 100 worshippers will attend the site, evenly spread across two separate prayer sessions. This surveyed parking vacancy extends to this period (as demonstrated in the survey results) and supports the use of public streets for parking during the 90 minute-span across both the Friday communal prayer sessions.

Overall, the parking survey data from 2020 is relatively consistent with that collected in 2019. The slight increase in demand is likely attributed to more people working from home due to the effects of COVID-19, with more students also typically arriving and departing school by private car. Hence, parking demand and traffic activity would generally be expected to be higher now than under typical conditions. Irrespective, there is more than adequate capacity to accommodate the parking demands associated with the proposal.

The special events that are proposed to be limited to ten occurrences per year and typically expected to be public holidays that fall on a Friday, and the first and last two days of Ramadan. The parking surveys confirm a maximum demand of 85 vehicles on Botany Street and Ethel Street during these periods, leaving about 75 vacant spaces.

Based on attendance of 120 worshippers and a conservative travel mode share of 97 per cent travel by car and an average occupancy of 1.5 persons per car, this equates to a demand of 78 cars. With the Plan of Management (PoM) specifying the use of 18 on-site parking spaces (**four separate and additional spaces provided to staff**) the remaining demand for on-street parking on these 10 occasions per year equates to about 60 cars and over a period of less than 60 minutes.

This is highly conservative for these important events as worshippers are known to travel together (mostly as a family) and far more than they do for typical prayers. As a result and based on previous surveys of other places of public worship, vehicle occupancy is expected to be higher. Based on a realistic average of two to 2.5 people per car, the on-street parking demand would be between 25 and 35 spaces.

With surveys indicating about 75 vacant spaces on Botany Street and Ethel Street during weekday evenings, the absolute peak demand for on-street parking during these ten special events is estimated to be between 30 and 45 per cent of the remaining vacant spaces. This still leaves 40 to 50 vacant spaces. In the unlikely event that the average occupancy is as low as 1.5 people per car, there would still be 20 vacant spaces on Botany Street and Ethel Street. This clearly represents a manageable impact on the immediate surrounding streets during these ten occasions per year and assumes use of Botany Street and Ethel Street only. No reliance on the available parking on Xenia Avenue or other local streets in the vicinity is necessary.

A summary parking assessment is included in Table 1.

Table 1: Special event parking demand overview

Special event capacity	Vehicle occupancy	On-site parking demand	On-street parking demand
120 people (97% car mode share)	conservative 1.5 people	18 cars [1]	60 cars
	average 2 people		40 cars
	expected 2.5 people		29 cars

[1] Total of 22 on-site spaces, with four assumed to be used by staff.

A comparison of all parking data and the relevant parking inventory and occupancy is shown in both table and graph format with the busiest lunchtime prayer sessions highlighted. Photos taken at the time of the surveys are included in Figure 3 and Figure 4.

Table 2: Parking occupancy data for all parking study area

All Total	Parking Restriction	Available Spaces	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00
Inventory	Excl. Disabled	261	261	261	261	261	245	245	261	261	261	261	261	261	261
Friday 2019 Occupancy	Excl. Disabled				110	106	97	94	92	104					
Friday 2020 Occupancy	Excl. Disabled				105	112	121	120	110	118	102	113	121	130	129
Wednesday 2020 Occupancy	Excl. Disabled								104	104	96	100	104	99	106
Thursday 2020 Occupancy	Excl. Disabled		85	94	94	113	113	154	113	115	98	101	107	110	109
Average			85	94	103	110	110	123	105	110	99	105	111	113	115
% Capacity			33%	36%	39%	42%	45%	50%	40%	42%	38%	40%	42%	43%	44%

Table 3: Parking occupancy data for Botany Street and Ethel Street only

Total	Parking Restriction	Available Spaces	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00
Inventory	Excl. Disabled	167	163	163	163	163	147	147	163	163	163	163	163	163	163
Friday 2019 Occupancy	Excl. Disabled				80	78	69	65	62	68					
Friday 2020 Occupancy	Excl. Disabled				72	79	88	93	84	81	67	69	77	85	83
Wednesday 2020 Occupancy	Excl. Disabled								76	76	65	61	65	63	67
Thursday 2020 Occupancy	Excl. Disabled		70	80	78	93	89	115	86	86	65	63	65	68	69
Average			70	80	77	83	82	91	77	78	66	64	69	72	73
% Capacity			43%	49%	47%	51%	56%	62%	47%	48%	40%	39%	42%	44%	45%

Figure 1: Inventory and occupancy of all parking areas

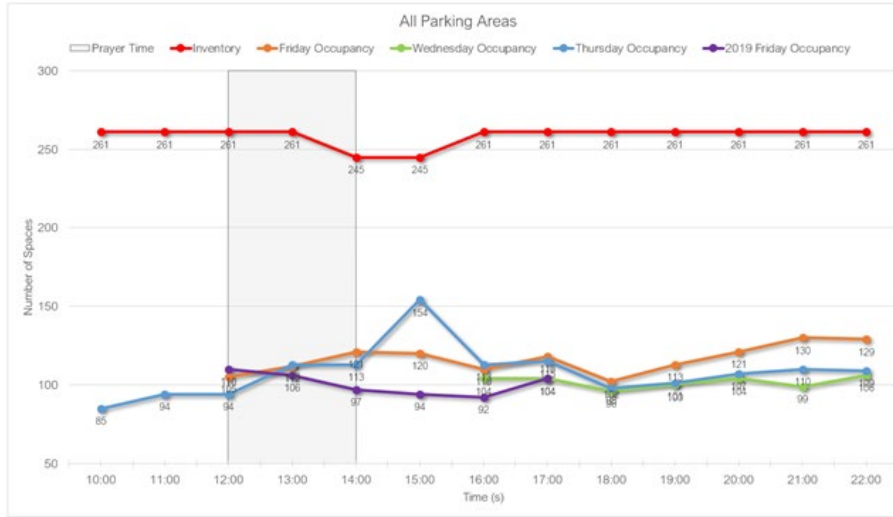


Figure 2: Inventory and occupancy of Botany Street and Ethel Street only

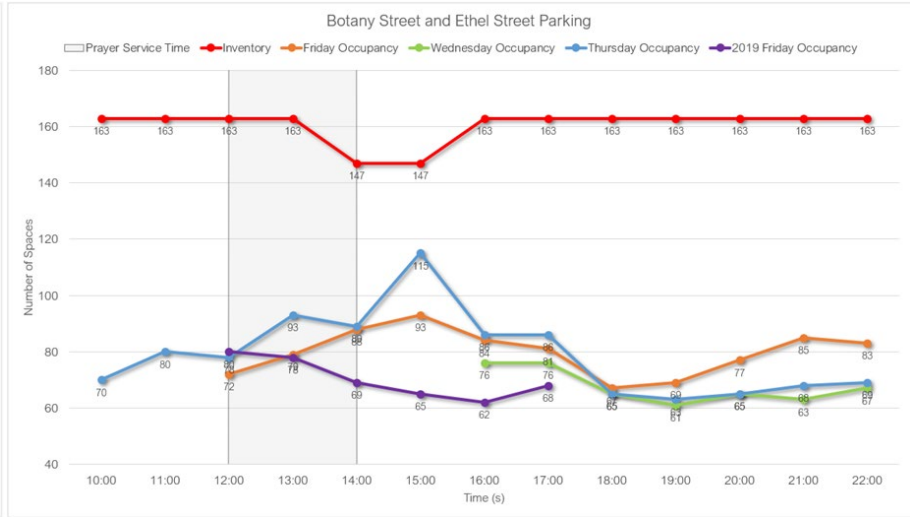


Figure 3: Botany Street Friday 1:00pm parking conditions



Figure 4: Ethel Street Friday 1:00pm parking conditions



Council Comment 3: Any additional traffic counts shall provide documentation detailing the implications of the COVID-19 environment whilst undertaking these counts and whether the counts provide a reliable data in this situation. Any interpolation/assumptions made with respect to the traffic counts needs to be appropriately documented to ensure there is a clear understanding of the data capture and limitations.

GTA Response:

The additional parking surveys were completed in late July and early August 2020. This coincides with weeks 2 and 3 of school term 3 and at a time where all students were attending school across NSW. While this can be representative of normal or typical conditions, it is nonetheless important to recognise the effects of COVID-19 on how people work and travel.

It is safe to assume that a higher proportion of people are currently working from home and not commuting daily. This points to greater demand for parking throughout the day and is generally reflected in the 2020 survey data when compared with the 2019 surveys. The Friday data indicates a marginal increase (up to 10 vehicles) during the day and up to 20 vehicles during the school pick-up period. This is expected given more school aged students are currently being driven to and from school daily.

Overall, the combined parking data is robust and highly conservative given future conditions are likely to return once the effects of COVID-19 dissipate. Demand for parking is now higher than outside COVID-19 conditions with this assessment confirming with or without these effects, the temporary demands that are generated by the place of worship (ten special events a year running approximately 50 minutes and Friday communal sessions at 90 minutes) are minor and able to be readily accommodated on-site with manageable impacts on Botany Street and Ethel Street.

Council Comment 4: Having regard to safety concerns relating to the practical use of the narrow Xenia Avenue and Ethel Lanes, any additional traffic assessment documentation should not rely on on-street carparking to service the development along these public roads.

GTA Response:

This comment is noted and agreed. Ethel Lane is a narrow local access lane with parking not permitted along its length. This includes the short section between Botany Street and Xenia Avenue. It is also understood that Council is considering a plan to convert Ethel Lane to one-way westbound between Botany Street and Lily Street. This is not expected to affect the operation of the place of worship. Xenia Avenue is also narrow and while parking is generally permitted, is not considered appropriate for parking associated with the place of worship. The PoM will include details on communication requirements with worshippers on parking arrangements.

The above assessment has excluded these streets (and other local streets in the study area) with Botany Street and Ethel Street readily able to accommodate any such additional parking demand. Both streets also have one side that fronts the school, further minimising any perceived impacts on local residents.

Council Comment 5: Documentation is required providing evidence to support the modal share assumptions referenced in the existing assessment lodged e.g. data from other relevant facilities, car occupancy assumptions and worshiper attendance habits.

GTA Response:

Comparison with similar developments and places of worship has been made as part of the transport assessment. This includes mosques in South Granville and Kellyville. Observations of the operating nature of each were made with South Granville having a car travel mode share of 100 per cent and an average occupancy of 2.86 people per car. This resulted in the 400 worshippers travelling (and parking) in 140 cars.

The car travel mode share was similar for Kellyville with up to 380 worshippers recording an average of 98 per cent over two survey weeks and an average 1.4 to 1.5 people per car. With the proposed place of worship in Carlton being considerably smaller in maximum capacity and with greater access to public transport services and surrounding amenities (and Hurstville CBD), a slightly lower rate of 95 per cent travel by car was adopted for the DA. The assessment now conservatively increases this to 97 per cent. Either way, such minor changes in travel mode do not result in a tangible change in overall parking demand. That is, less than one vehicle for every one per cent change in travel mode based on the maximum 120 worshippers.

Council Comment 6: The 100 - 120 worshipper events are to be appropriately modelled, with the 120 worshipper events frequency being assumed on an 'average' basis as to where they land throughout the year (e.g. Fridays, Ramadan etc.).

GTA Response:

As discussed, the 120 worshipper events will be limited to ten per year typically expected to be public holidays that fall on a Friday, and the first and last two days of Ramadan with each session lasting about 50 minutes. In 2020, Ramadan occurred between late-April and late-May with each subsequent year seeing a 10-day shift to earlier in the year. For example, in 2023, Ramadan will occur between late-March and late-April. The remaining two events will be spread across the year. Overall, the slight change in dates is not expected to affect the overall supply and demand of on-street parking in the local area with the anticipated impacts associated with the place of worship and such events detailed in response to comment 2 above.

Council Comment 7: Council notes that some Mosques operate split prayer times in order to accommodate large worshipper groups during peak times and it is reasonable to consider this option as part of the subject application. If appropriate, consideration should be given to the 100 or 120 worshipper events being staggered to accommodate two prayer times of 50 or 60 worshipper limits for the peak Friday event having regard to the limited on-site car parking availability. Due consideration would need to be given to:

- *The staggered two prayer times should be undertaken with at least 15 or 20 (preferable) minute intervals to enable the 'change over' of worshipers to make available the onsite parking.*
- *The prayer times should remain within the time period previously identified, particularly, the lunchtime prayer session should have suitable regard to the parent pick-up times for students at the High School.*

GTA Response:

These comments are noted and agreed. The regular Friday prayer sessions can be managed as split sessions with a maximum of 50 worshippers at any one session. A 15 minute separation of these will also be implemented to ensure no overlap of demand. These prayer sessions will occur between 12:00pm and 2:05pm and will also not overlap with any pick-up activity associated with the school. All worshippers will have departed by 2:30pm at the latest.

A 50 worshipper prayer session with a travel mode share of 97 per cent by car and an average 1.5 people per car results in a demand of 33 parked cars. With 18 parking spaces available on-site for worshipper use, the on-street demand along Botany Street and Ethel Street would be 15 cars. With 70 vacant spaces during this period, the parking impacts would be minor.

I trust the above provides the information you require. Should you have any questions or require any further information, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

GTA CONSULTANTS



Rhys Hazell
Director

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