

64 MOUNTFORD AVENUE, GUILDFORD
PROPOSED PLACE OF PUBLIC WORSHIP (MOSQUE)
& ASSOCIATED FACILITIES



**TRAFFIC & PARKING
IMPACT ASSESSMENT**

JUNE 2019

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**TRAFFIC & PARKING IMPACT ASSESSMENT
64 MOUNTFORD AVENUE, GUILDFORD
PROPOSED PLACE OF PUBLIC WORSHIP
& ASSOCIATED FACILITIES
DATE: 25 JUNE 2019**

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Document Management

Traffic & Parking Assessment – 64 Mountford Avenue, Guildford

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Table of Contents

1	INTRODUCTION	2
2	EXISTING SITE DESCRIPTION	3
3	EXISTING TRAFFIC CONDITIONS	5
3.1	Road Network and Classification	5
3.2	Road Description and Traffic Control	5
3.3	Current Traffic Flows	7
3.4	Existing Transportation Services	9
4	PROPOSED DEVELOPMENT	10
4.1	Description of the proposal	10
4.2	Proposed weekly scheduled use of the site	12
4.3	Vehicular & Pedestrian Access	14
5	PARKING IMPACTS	15
5.1	On-site Parking Provision	15
5.2	On-site Parking Layout and Circulation	17
5.3	Mode of Travel survey for existing congregation at 64 Mountford Ave, Guildford .	19
5.4	Existing On-street Parking Controls	20
5.5	On-street Parking Utilisation Survey	20
5.5.1	Results of Parking Utilisation Surveys	21
5.6	Impacts of Proposed Development on Parking	22
6	TRAFFIC IMPACTS	23
7	MANAGEMENT OF PARKING DURING SPECIAL EVENTS	24
8	CONCLUSIONS	25
	Appendix A – Proposed Development Plans	26
	Appendix B – Traffic Volume Counts	34
	Appendix C – Vehicle Swept Paths	39

1 INTRODUCTION

This report has been prepared by Hemanote Consultants on behalf of the Islamic Community Milli Gorus (ICMG Sydney), to assess the traffic and parking implications for the proposed reconstruction of the existing place of public worship (mosque) and associated facilities located at 64 Mountford Avenue, Guildford.

It should be noted that the subject site is currently used as a place of public worship (mosque) for the same congregation that will utilise the proposed development.

The report is to be read in conjunction with the architectural plans prepared by Designiche Pty Ltd (reduced copy of the plans attached in Appendix A of this report) and submitted to Cumberland Council as part of a Development Application.

This report is set as follows:

- *Section 2: Description of the existing site location and its use;*
- *Section 3: Description of existing traffic & transport conditions and surrounding road network;*
- *Section 4: Description of the proposed development and vehicular access;*
- *Section 5: Description of on-site parking provision, layout and circulation, Mode of Travel survey for the existing mosque congregation, Assessment of on-street parking conditions and utilisation near the subject site; and impacts on parking;*
- *Section 6: Assessment of impacts on traffic on surrounding road network;*
- *Section 7: Management of parking during special events; and*
- *Section 8: Outlines Conclusions.*

2 EXISTING SITE DESCRIPTION

➤ Site Location

The subject site is located on the southern side of Mountford Avenue at property No. 64 Mountford Avenue, in the section between Talbot Road and Marian Street, within the suburb of Guildford. The site is also legally known as Lot 18 DP 683 and has a frontage of approximately 27.7 meters to Mountford Avenue from the north. Refer to Figure 1 for a site locality map.

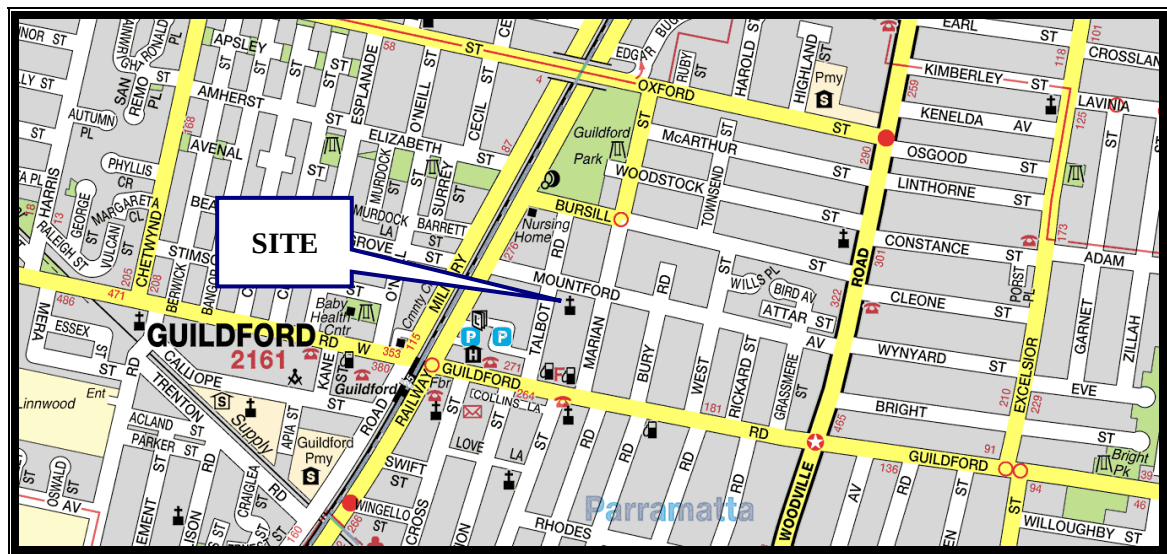


Figure 1: Site Locality Map

➤ Existing Site & Surrounding Land Use

The subject site has an area of approximately 1,654m² and is currently occupied by an existing single-storey place of public worship (mosque). The site is located in a mainly residential area, characterised by single dwelling houses and small sized residential flat buildings. It is located in close proximity to Guildford Park, Guildford Library and Guildford Railway Station.

The subject site is currently used as a mosque for the same congregation that will utilise the proposed mosque facility once reconstructed. The subject site has two access driveways in Mountford Avenue and provides for up to six (6) off-street at-grade car parking spaces.



Photo 1: Existing site frontage to Mountford Avenue

3 EXISTING TRAFFIC CONDITIONS

3.1 Road Network and Classification

Mountford Avenue is a local road that runs east-west between Railway Terrace (collector road) and Woodville Road (state road). It intersects with a number of local streets including Talbot Road and Marian Street near the subject site.

3.2 Road Description and Traffic Control

Mountford Avenue is a four-lane two-way undivided road, with a carriageway width of approximately 12 metres. This carriageway generally provides one travel lane per direction, plus kerbside parking lanes. At present, unrestricted parking is permitted on both sides of the road, with the exception of the signposted 'No Stopping' near intersecting streets.

The legal speed limit on Mountford Avenue is 50 km/hr. Mountford Avenue intersects with Talbot Road and is controlled by 'Stop' signs giving priority to vehicles travelling along Mountford Avenue. Mountford Avenue also intersects with Marian Street near the subject site and is controlled by a roundabout.



Figure 2: Aerial photo - subject site and surrounding road network



Photo 2: Mountford Avenue near the subject site - facing northwest



Photo 3: Mountford Avenue near the subject site – facing southeast

3.3 Current Traffic Flows

Traffic volume counts were undertaken by Traffic Analytics on behalf of Hemanote Consultants at the roundabout of Mountford Avenue / Marian Street and the cross intersection of Mountford Avenue / Talbot Road near the subject site on Friday 19 October 2018, during late morning/early afternoon period (11.00am to 2.00pm) and afternoon period (3.00pm to 6.00pm), considering the subject site peak hours of operation and traffic peak periods. The current traffic flows near the subject site are shown in Table 1 below and in Appendix 'B' of this report.

Traffic movement	Late Morning/Early Afternoon Peak Hour (Vehicles Per Hour)	Afternoon Peak Hour (Vehicles Per Hour)
	1.00pm – 2.00pm	3.00pm – 4.00pm
Mountford Avenue		
Eastbound	187	190
Westbound	99	50
Marian Street		
Northbound	232	261
Southbound	115	156
Talbot Road		
Northbound	111	118
Southbound	57	44

Table 1: Current traffic flows on Mountford Ave and surrounding roads (on a typical weekday)

The results of the traffic volume counts undertaken determined that the traffic late morning and afternoon peak periods on Mountford Avenue was between 1.00pm to 2.00pm and 3.00 pm to 4.00pm on a typical weekday.

The traffic flows on Mountford Avenue near the subject site are considered to be appropriate in a residential area. Traffic is free flowing without any major queuing or delays in peak hours, with spare capacity.

It should be noted that the above traffic volumes includes the traffic generated from the current use of the subject site by the existing mosque congregation.

It is determined that the existing level of service on Mountford Avenue ranges from level 'A' to 'B' at times, in accordance with Table 4.4 of the Roads & Maritime Services "Guide to Traffic Generating Developments - 2002" (attached below) with peak hour flow being less than 380 vehicles/hour per lane per direction.

Level of Service	One Lane (veh/hr)	Two Lanes (veh/hr)
A	200	900
B	380	1400
C	600	1800
D	900	2200
E	1400	2800

Table 4.4: Urban road peak hour flows per direction (RMS Guide)

➤ **Current Intersections Performance**

Average Vehicle Delay (AVD) and Level of Service (LOS) – The AVD and LOS provide a measure of the operational performance of an intersection as indicated in Table 4.2 of the Roads & Maritime Services' "Guide to Traffic Generating Developments - 2002" (attached below).

It has been observed that the operational performance of the intersection of Mountford Avenue / Marian Street and Mountford Avenue / Talbot Road, is in 'Good operation with acceptable delays and spare capacity' at a Level of Service ranging from 'A' to 'B', with an average delay less than 28 seconds per vehicle.

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	< 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays Roundabouts require other control mode	At capacity, requires other control mode

Table 4.2: Level of Service Criteria for intersections (RMS Guide)

3.4 Existing Transportation Services

The subject site is well served by public transport services in the form of trains and buses. The site is located approximately 450 metres north-east of Guildford Railway Station (short walking distance).

Regular bus services operate along Guildford Road, Talbot Road, Mountford Avenue and Railway Terrace in the vicinity of the subject site (i.e. bus routes 906 and 908).

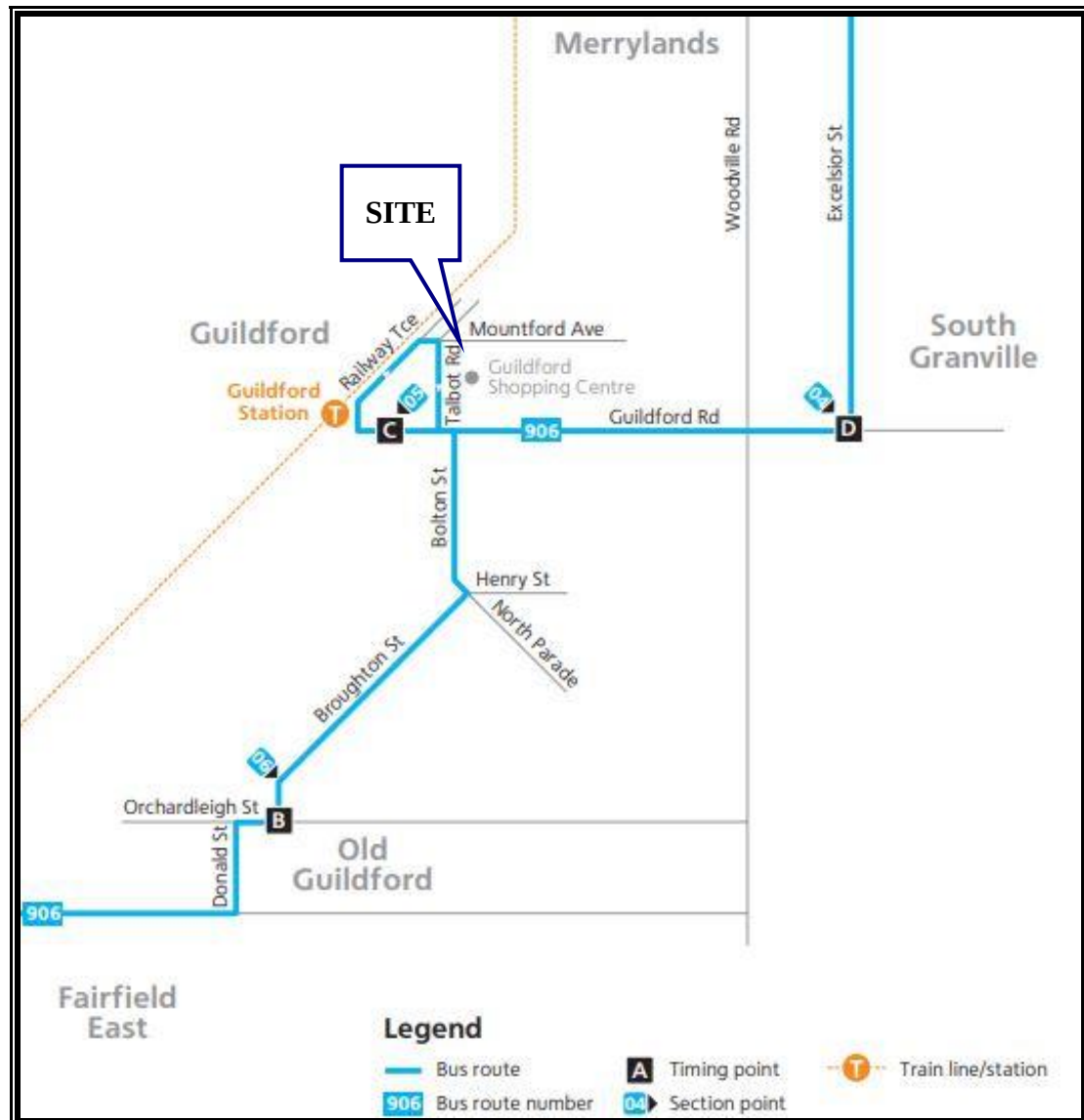


Figure 3: Local bus routes in the vicinity of the subject site

4 PROPOSED DEVELOPMENT

4.1 Description of the proposal

The proposed development application seeks approval for the demolition of existing place of public worship at 64 Mountford Avenue, Guildford and the reconstruction of a new place of public worship (mosque) over a basement car park, to be used by the Islamic Community Milli Gorus (ICMG Sydney).

It should be noted that the subject site is currently used as a place of public worship (mosque) for the same congregation that will utilise the proposed development.

The proposed development will include the following elements:

- A total floor area of 1,313.58 m² over three levels.
- Level 1:
 - Male prayer hall with an area of 311.36m².
 - Lecture hall with an area of 151.38m².
 - Coffee/Book store with an area of 40.5m².
 - IMAMS room with an area of 18.47m².
 - Main foyer and associated Amenities
- Level 2:
 - Female prayer hall with an area of 194.40m².
 - A boardroom with an area of 31.01m².
 - Two offices with an area of 16.09m² and 10.52m².
 - Four classrooms with an area of 20.72m², 26.05m², 26.17m² and 21.62m²
 - A ladies room with an area of 23.59m².
 - Associated Amenities.

- Level 3:
 - Two guest rooms with an area 20.09m² and 16.44m².
 - Youth room with an area of 36.17m².
 - A plant room and associated Amenities.
- Upper & lower basement levels:
 - An on-site parking area over two basement levels for a total of fifty-eight (58) car parking spaces, including two (2) accessible parking spaces.
 - One (1) loading bay.

Refer to **Appendix 'A'** for the proposed development plans.

4.2 Proposed weekly scheduled use of the site

The proposed different weekly uses of the subject site (to be known as Guildford Mosque) are staggered across the week, as shown in the following list:

There are five (5) daily Islamic prayer services that operate for a maximum of 15 minutes each that are related to the cycle of the sun and accordingly vary slightly throughout the year from summer to winter.

The following are the expected worship start range times, based on the hours that the sun rises and sets and the expected number of worshippers:

- Sunrise dawn prayer between 6:00am-7:00am (**30-40 people**).
- Lunch time prayer between 12:00pm-1:00pm (**40-50 people**).
- Afternoon prayer between 3:00pm-4:30pm (**20-30 people**).
- Sunset between 5:00pm-7:00pm (**30-40 people**).
- Evening prayer between 7:00pm-10:00pm (**60-70 people**).

The proposed mosque will hold regular evening meetings on site, attracting an average of **8-10 people** with a maximum of **15 people**. The meeting will be held in the boardroom and will end by **9:00pm**.

Staff numbers

A total of 4-5 casual staff members will be on site on a daily basis between the hours of **9:00am-6:00pm Monday to Friday** and **9:00am-4:00pm on Saturday**.

Social gatherings will be held on site between the hours of **9:00am-6:00pm** and should attract **10-15 people** each time.

Seminars and workshops will also be held on site in the lecture hall, some during **business hours and the evening hours**, and will end by **9pm Monday to Thursday** and **11pm Friday and Saturday nights**. It is estimated that this will attract an average of **150 people**.

Saturday school will be held between **9:00am-2:00pm on Saturdays** in the classrooms, attracting a total of **80 students** at any given time. Youth activities will

also be held every **Saturday evening** between **6:00-9:00pm**, and will attract a maximum of **40 people**.

Special events such as Weekly Friday prayers, Ramadan prayers and Eid prayers will attract higher numbers of people than the typical daily maximum capacity and are as follows:

- Weekly Friday afternoon Prayers between 12:30-2:30pm for approximately 30-40 minutes – max **450 people**.
- Ramadan Payers (30 consecutive days per year) between 7:00-9:00pm for approximately 40 minutes – max **250 people**.
- First Eid Prayers (Ramadan Eid prayers - day after end of Ramadan) between 6:00-8:00am for approximately 30 minutes – max **300 people**.
- Second Eid Prayers (Eid of Adha prayers - 70 days after First Eid Prayers) between 6:00-8:00am for approximately 30 minutes – max **300 people**.

All proposed activities within the subject development site are to be staggered, as outlined above and that during the prayer times, none of the other facilities will be used or occupied, in order to ensure that the site is not over crowded and that parking on-site is sufficient and well managed. The worship services are not to start until at least 3 minutes have passed following the completion of any preceding prayer service or other use and the same applies for other uses following the completion of the worship services.

It should be noted that the peak use of the site will only take place during the weekly Friday afternoon prayers (around midday), where the majority of residents in surrounding properties are at school or work. The Friday afternoon prayers take place outside of morning and afternoon peak traffic and parking periods.

4.3 Vehicular & Pedestrian Access

The existing site currently has two driveway crossings along the site frontage in Mountford Avenue, which will be removed to allow for just one new driveway crossing (combined entry and exit).

The proposed access driveway crossing has a width of 6.1 metres, which is adequate and in accordance with AS2890.1:2004 – Table 3.2, providing for two-way traffic, where two vehicles in opposing directions can pass each other without causing congestion or delays within the site or on Mountford Avenue.

The proposed new access driveway is located approximately 3.4 metres from the western boundary of the site and provides a splay (2.5m x 2m) at the exit side of the driveway, as per the requirements of Figure 3.3 of AS2890.1:2004, to provide adequate sight lines to pedestrians. It needs to be clear of any high fencing or obstructions.

The existing driveway crossings are to be removed and replaced with footpath, kerb and gutter, to Council standards, to make sure that the number of existing on-street car parking spaces is maintained and is not affected by the proposed development.

All vehicular access is to be located and constructed in accordance with the requirements of AS2890.1:2004, where adequate sight distance is provided and vehicles are to enter and exit the site in a forward direction at all times.

A separate pedestrian access to the mosque site with a width of 1.5 metres is provided at the front near the north-east corner of the site on Mountford Avenue, to segregate pedestrian and vehicular movements and improve safety within the site. The separate pedestrian access will also provide a ramp with a grade of 1:15.9 to allow for disability access.

5 PARKING IMPACTS

5.1 On-site Parking Provision

Parramatta DCP 2011, Part 5.3.3 states that onsite parking shall be provided at the rate determined by the traffic impact statement. It indicates that as a general guide for places of public worship developments should provide 1 car parking space per 5m² of usable floor space for the first 100m² and 1 car parking space per 3m² of usable floor space thereafter. Usable floor space not being corridor space, stairways, storage areas, toilets and other floor space that will not increase the capacity of the development.

The proposed development provides a total prayer hall area for males and females over two levels of 505m².

The application of the above mentioned suggested parking rates in Council's DCP, would require the provision of 155 car parking spaces, which is considered to be excessive for the subject mosque site in Mountford Avenue, Guildford, which is located in a residential area where a considerable number of existing worshippers are from the local neighbouring properties and area and often walk to and from the site, as demonstrated by the 'mode of travel' survey undertaken for the existing mosque congregation, for the purpose of the subject development application and traffic/parking assessment and outlined in Section 5.3 of this report.

This survey was undertaken to determine the realistic car parking rate for the existing mosque site and the proposed increase in congregation numbers for the Guildford Mosque at the subject site. The survey indicated that a total of 253 people/worshippers generated a parking demand of 36 cars (with a total of 144 people utilising a car as the mean of travel and the others walking and utilising other means of travel), which is an average of 4 people per car travelling to the site (i.e. typically being mum and dad with one or two children or a small group of friends or neighbours). In some instances, 4 or 5 members travelled in one car and some others utilised carpooling with a friend or neighbour.

The surveys undertaken determined a typical average parking generation rate of 1 car space per 7 worshippers in attendance, taking into account that family members, friends, neighbours and work colleagues typically tend to travel together and utilise carpooling to attend the Friday prayers, as well as worshippers who live locally or

nearby who tend to walk to the church site or travel using public transport and other means of travel.

This rate 1 car parking space per 7 worshippers in the congregation will be adopted for the subject site, which will have a maximum capacity of 450 people, therefore, requiring approximately 64 car parking spaces.

The mosque will also run a mini-bus shuttle service to pick-up and drop-off members of the local community and in particular the elderly when needed from the surrounding area.

The proposed development provides for fifty-nine (59) off-street car parking spaces, including two (2) accessible parking spaces, in addition to a dedicated loading bay, over two basement levels. **The proposed off-street car parking provision is considered to be adequate for the proposed use of the subject site and will cater for the anticipated future congregation.**

It should be noted that the existing subject mosque site only provides for up to 6 off-street car parking spaces and that the existing congregation averaging 250 people on Fridays, currently have no issues obtaining on-street parking during the prayer service duration.

Convenient on-street car parking opportunities are available in the vicinity of the subject site on Mountford Avenue and adjoining streets and do not affect the amenity of the surrounding area.

Waste Collection

Waste bins are to be stored in the dedicated waste bin storage area within the site and waste bins will be transported by the site manager / caretaker to the road kerbside for collection on waste collection day.

5.2 On-site Parking Layout and Circulation

The layout of the on-site car parking areas and manoeuvring arrangements has been designed to enhance vehicular access, where vehicles can enter and exit the site in a forward direction, through the provision of adequate internal aisles width and turning space.

AS2890.1:2004 Parking facilities Part 1: Off-street car parking requires a minimum parking space width of 2.4 metres and a minimum length of 5.4 meters. The proposed off-street car parking spaces have a minimum width of 2.5 metres and a length of 5.4 metres each, which is adequate.

The accessible car parking spaces for people with a disability has a width of 2.5 metres, in addition to an adjacent 2.5 metres wide shared/no parking area with a bollard, which is adequate in accordance with AS2890.6:2009. The loading bay has a clear width of 3 metres, which is adequate for the use by the typical standard van or ute.

Clause 2.4.2 of AS2890.1-2004 requires a minimum aisle width of 5.8 metres for two-way aisles, adjacent to 90° angle parking. The proposed aisles within the site have a minimum width of 6 metres, which is adequate for two-way traffic and for manoeuvring in and out of parking spaces.

Car parking spaces adjacent to walls/obstructions have been made wider than the minimum width, to accommodate full door opening in accordance with Clause 2.4.2 (d) of AS2890.1:2004. The blind aisles have been extended by a minimum of 1 metre beyond the last parking space, in accordance with Clause 2.4.2 (c) of AS2890.1:2004.

Columns are located minimum 750mm from the front of the parking space and minimum 3650mm from the close end of the space, which is adequate and in accordance with Figure 5.1 of AS2890.1:2004.

A minimum 2.2 metres headroom clearance is to be provided for ramps and throughout the car parking area from the car park basement levels to the underside of all services conduits and suspended stormwater pipelines, in accordance with Clause 5.3.1 of AS2890.1:2004. A 'maximum Clearance 2.2m' sign is to be erected at the entrance to the basement car parking area and is to be clearly visible to all drivers. A minimum 2.5 metres headroom clearance is provided above the accessible parking

and adjacent shared/no parking area, which is adequate and in accordance with Clause 2.4 of AS2890.6:2009.

The proposed access ramps have a clear width of 6.1 metres for two-way ramps, which is adequate and in accordance with AS2890.1:2004. The proposed access ramps have an entry grade of 1:20 for the first 6 metres into the site and a maximum grade of 1:5 with a change of grade of 1:8 for 2 metres at either end of the ramp, which is adequate.

Traffic convex mirrors are to be installed within the car parking area at intersecting aisles and ramps, to provide motorists with further assistance with sight lines and vision of oncoming traffic.

All proposed vehicular manoeuvring within the site has been designed and checked using the B99 and B85 design vehicles from AS2890.1:2004. Refer to the vehicle swept paths diagrams attached in Appendix 'C' of this report.

Therefore, the car parking layout and vehicular circulation for the proposed development are considered to be adequate in accordance with AS2890.1:2004 and AS2890.6:2009, where vehicles can enter and exit the site in a forward direction at all times.

5.3 Mode of Travel survey for existing congregation at 64 Mountford Ave, Guildford

A 'mode of travel' questionnaire survey was undertaken for the existing mosque congregation at the subject site during the Friday prayer service on Friday 15 February 2019, to determine the parking demand and current mode of travel behaviour of the congregation, which is expected to continue for the increased future congregation.

A summary of the results of the survey questionnaire is outlined in the Table 2 below:

No. of people surveyed	Total No. of congregation attended	No. people utilising different Modes of Travel						
		Car	No. of cars used	Bus	Train	Walk	Bicycle	Other
140	253	144	36	-	4	98	7	-

Table 2: Survey questionnaire results – Friday 15 February 2019

The survey indicated that a total of 253 people generated a parking demand of 36 car parking spaces (with a total of 144 people utilising a car as the mean of travel, 98 people walked from the local area, 4 utilised public transport and 7 travelled on bicycles), which is an average of 4 people per car travelling to the site (i.e. typically being mum and dad with one or two children or a small group of friends or neighbours). In some instances, 4 or 5 members travelled in one car and some others utilised carpooling with a friend or neighbour.

The surveys undertaken determined a typical **average parking generation rate of 1 car space per 7 worshippers** in attendance, taking into account that family members, friends, neighbours and work colleagues typically tend to travel together and utilise carpooling to attend the Friday prayers, as well as worshippers who live locally or nearby who tend to walk to the church site or travel using public transport and other means of travel.

5.4 Existing On-street Parking Controls

The subject site is located in a mainly residential area, characterised by single dwelling houses and small sized residential flat buildings. It is located in close proximity to Guildford Park, Guildford Library and Guildford Railway Station.

At present, unrestricted parking is permitted on both sides of Mountford Ave and neighbouring roads, with the exception of the signposted 'No Stopping' near intersecting streets.

5.5 On-street Parking Utilisation Survey

A parking survey was carried out by Hemanote Consultants in Sections of Mountford Avenue, Talbot Street and Marian Street in the vicinity of the subject site on a Friday afternoon, before, during and after the peak use of the subject site for the weekly Friday prayer service, in order to determine the availability of on-street parking spaces and the current parking utilisation levels nearby the subject site.

The parking survey was undertaken at 15 minute intervals on Friday 15 February 2019 (between 11.00am to 3.00pm), considering the proposed peak hours of operation and use of the subject mosque site.

The parking survey considered a total of 135 on-street parking spaces within a reasonable walking distance of up to 200 metres from the subject site.

The parking survey considered on-street parking spaces at the following locations:

1. Mountford Street, both sides, between Railway Terrace and Bury Street (74 parking spaces – unrestricted parking).
2. Talbot Street, both sides, 100 metres north and south of Mountford Avenue (31 parking spaces – unrestricted parking).
3. Marian Street, both sides, 100 metres north and south of Mountford Avenue (30 parking spaces – unrestricted parking).

5.5.1 Results of Parking Utilisation Surveys

The parking survey determined the following:

- On-street parking spaces on both sides of Mountford Avenue were under-utilised with many vacant spaces between 11.00am and 12.30pm, with ample on-street parking opportunities, before starting to get occupied between 12.30pm and 2.00pm before worshippers of the existing mosque at the subject site, which had a prayer service in place between the hours of 1.15pm and 1.45pm. A large number of on-street parking spaces became vacant again between 2.00pm and 3.00pm following the departure of worshippers.
- It should be noted that the existing mosque site currently only provides up to 6 off-street parking spaces on site. Therefore, worshippers that travelled by car relied on parking in Mountford Avenue.
- On-street parking spaces on both sides of Talbot Street were under-utilised to the north of Mountford Avenue and moderately utilised to the south of Mountford Avenue, with ample on-street parking opportunities.
- On-street parking spaces on both sides of Marian Street were moderately utilised to the north and south of Mountford Avenue, with ample on-street parking opportunities.
- It has been observed that a large number of worshippers walked from the local and surrounding area and did not utilise a car to travel to and from the subject mosque site.

The parking survey undertaken has indicated that ample on-street car parking opportunities are available in the vicinity of the subject site, which are currently being utilised by worshippers of the subject mosque site, due to the lack of available off-street parking on site at the present time. The survey also indicated that the worshippers occupied and utilised on-street parking for a maximum period of between 1 to 1.5 hours between 12.30pm and 2.00pm during the prayer service, which is outside of peak traffic and parking periods and had no impact on the amenity of the adjacent area and neighbouring properties.

It is anticipated that the proposed redevelopment of the subject mosque site, with fifty-nine (59) off-street car parking spaces provided on site would be considered a great

improvement to the current site layout and parking situation and would have a reduced impact on the need for on-street parking utilisation.

It should be noted that the results of the parking survey included parking generated by the existing congregation that attended the Friday prayer service at the subject site during the survey period.

Therefore, it is considered that there are adequate on-street parking opportunities available within less than 200 metres walking distance from the subject mosque site.

5.6 Impacts of Proposed Development on Parking

The parking demand resulting from the proposed redevelopment of the subject mosque site can be easily accommodated within the proposed on-site car parking provision, in addition to available ample on-street parking opportunities, as demonstrated in the parking surveys undertaken during the Friday afternoon peak use of the site.

It should be noted that the subject site has great access to existing public transport services in the form of trains and buses, within a short walking distance. It should also be noted that the majority of the adjacent properties have their own off-street parking facilities.

Therefore, the proposal will have no adverse impacts on parking in Mountford Avenue or surrounding streets.

6 TRAFFIC IMPACTS

➤ ***Estimated Future Traffic Generation***

The “*RMS Guide to Traffic Generating Development – 2002*” does not provide a traffic generation rate for places of worship.

It is considered that the highest vehicle trips from the proposed development will be generated during the weekly Friday afternoon prayer service.

As stated previously in this report, a typical average parking and therefore traffic generation rate of 1 car trip per 7 worshippers in attendance will be adopted for the subject site, which will have a maximum capacity of 450 people, therefore, generating approximately 64 vehicle trips arriving at the mosque site and 64 vehicle trips leaving the site. The above takes into account that family members, friends, neighbours and work colleagues typically tend to travel together and utilise carpooling to attend the Friday prayers, as well as worshippers who live locally or nearby who tend to walk to the church site or travel using public transport and other means of travel.

The mosque will also run a mini-bus shuttle service to pick-up and drop-off members of the local community and in particular the elderly from the surrounding area, when needed.

Therefore, it is estimated that approximately 128 vehicle trips to and from the subject site per peak hour will be generated during the weekly Friday early afternoon prayer period. Traffic generation of other uses of the site and at other prayer times of the week will be significantly lower.

The expected traffic generation from the proposed redevelopment of the mosque site is considered to be acceptable and will have no adverse impacts on existing traffic conditions in the area.

The additional traffic generation from the proposed redevelopment of the site is not expected to have any adverse impacts on the operational performance of the roundabout intersection of Mountford Avenue/Marian Street or ‘T’ Intersection of Mountford Avenue/Talbot Road and will remain at the current levels of service ‘in Good Operation with acceptable delays and spare capacity’.

7 MANAGEMENT OF PARKING DURING SPECIAL EVENTS

The expected maximum attendance during Special religious Events such as Ramadan and Eid (festivals) at the subject mosque site is likely to be in the order of between 250 to 300 people.

The parking demand during special events can be accommodated within proposed off-street car parking provision, in addition to available ample on-street parking in nearby streets, if required.

It is recommended that at least 2 staff/traffic marshals patrol the site and adjacent area in a high visibility gear during special events, to ensure there is no disturbance to adjacent properties and to control movements of vehicles into and out of the site.

MANAGEMENT OF PARKING DURING SPECIAL EVENT OPERATIONS:

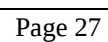
- The management of the Mosque is to provide members of its congregation with an educational flyer advising of safe parking and traffic practices during special events and peak use of the site and that all vehicles are to be parked within the dedicated and marked parking spaces within the subject site. Where additional parking is required, parking is to occur in adjacent streets (once the car park is full) and under no circumstances that members block driveways of neighbouring properties.
- Qualified staff/traffic marshals in high visibility gear will be present on site to regulate traffic movements into and out of the site and to manage on-site parking and any overflow of parking in adjoining streets, to ensure that no vehicles are illegally parked and are not obstructing driveways of adjoining properties.
- The mosque will also run a mini-bus shuttle service to pick-up and drop-off members of the local community and in particular the elderly from the surrounding area, when needed.

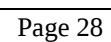
8 CONCLUSIONS

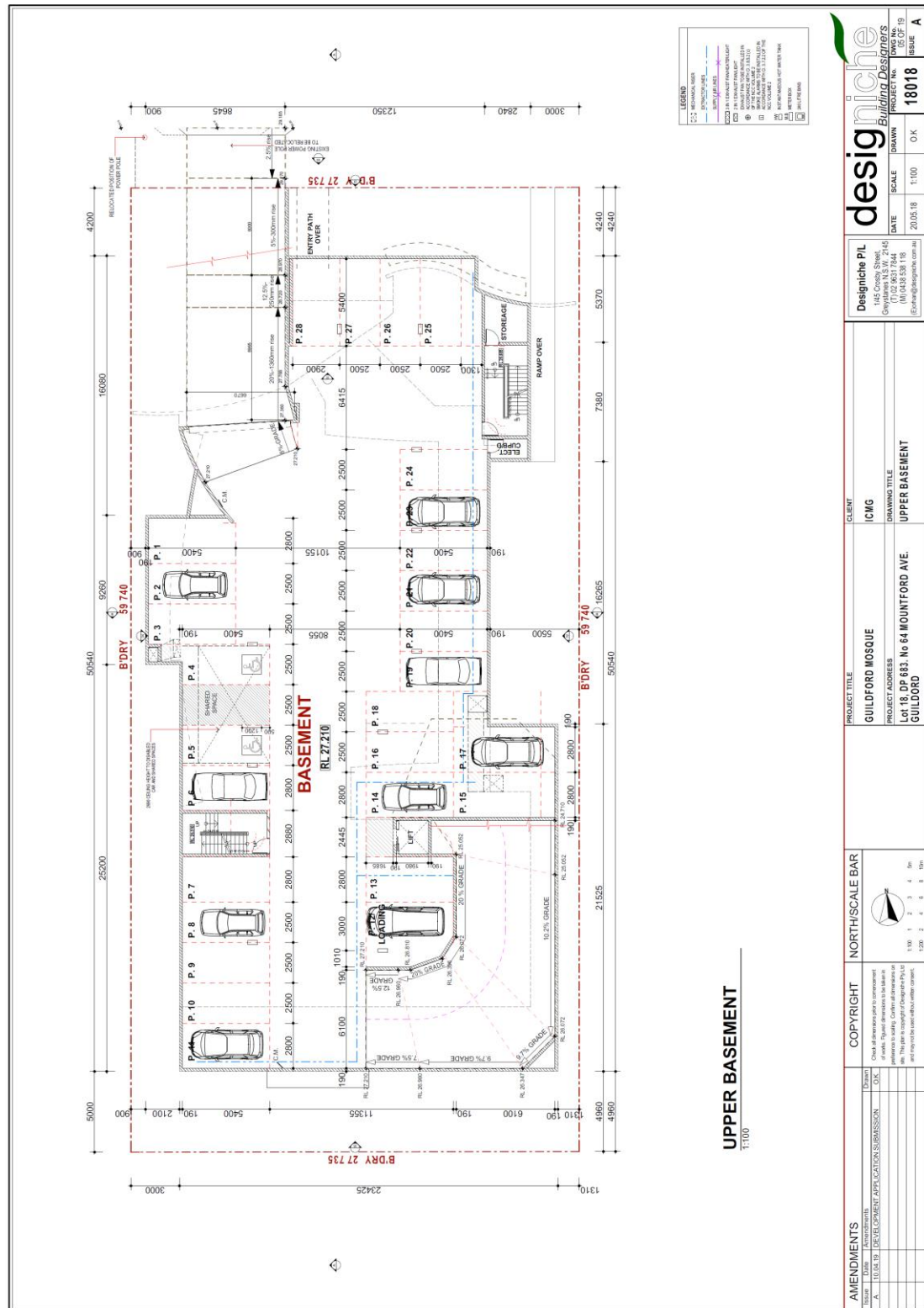
It can be concluded from the traffic and parking impact assessment that the proposed redevelopment of the existing place of public worship (mosque) at 64 Mountford Avenue, Guildford will have no adverse impacts on existing traffic or parking conditions and satisfies the objectives of PDCP2011 and should be supported in its present form.

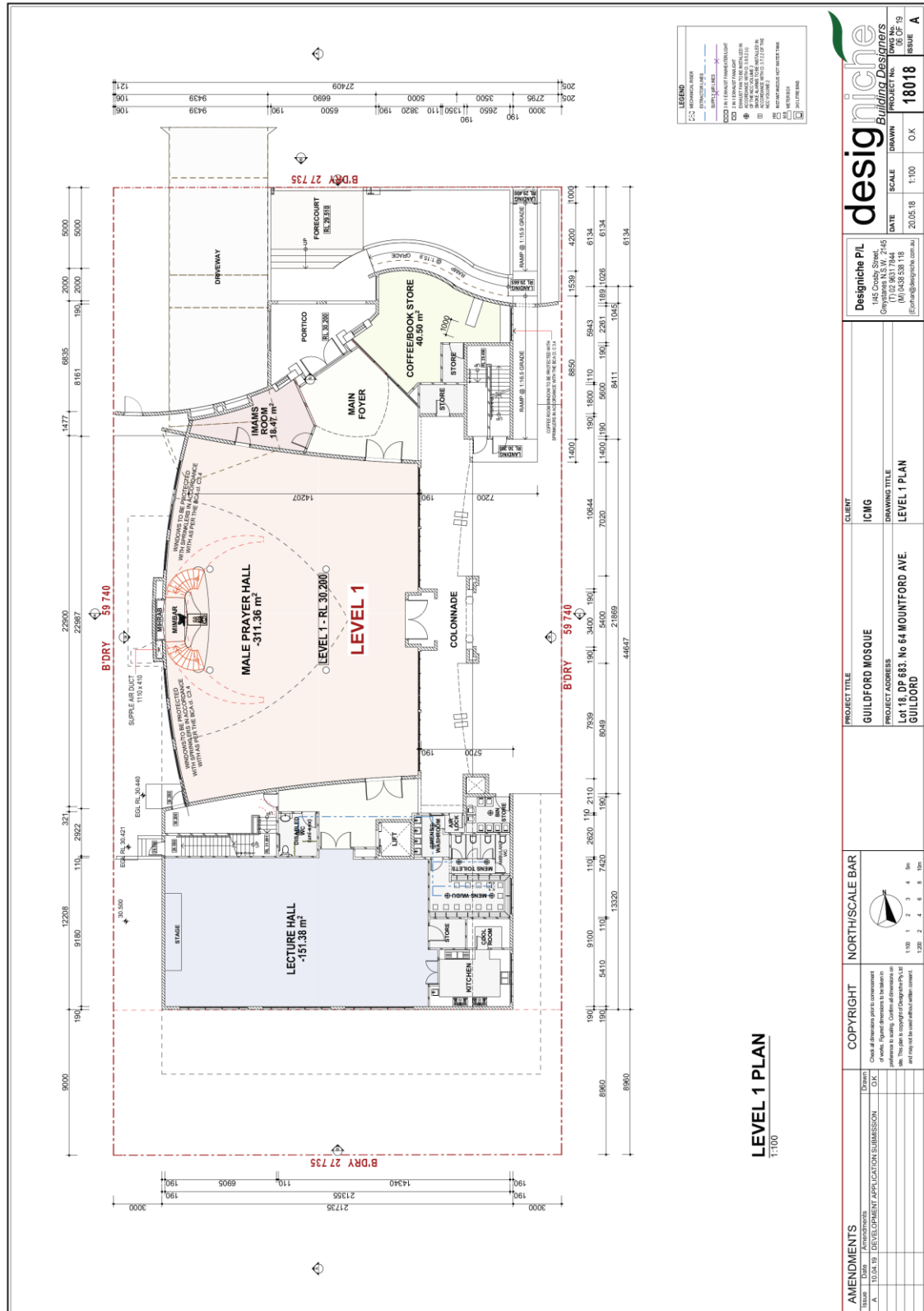
- The current traffic flows on Mountford Avenue are considered to be appropriate for a local road having an existing mosque site during the weekly Friday congregational prayer service. Traffic on Mountford Avenue is free flowing without any major queuing or delays in peak hours on Fridays, with spare capacity.
- The estimated traffic generation from the proposed development is considered to be of low impact on existing flows on Mountford Avenue and the surrounding road network. The traffic generated by the proposed redevelopment of the subject site will not alter the current levels of service and additional traffic can be accommodated within the existing road network.
- It should be noted that the subject site is currently used as a place of worship, as a mosque, for the same congregation that will utilise the proposed development.
- The level of on-site parking provision is considered to be adequate for the proposed development and based on the mode of travel survey undertaken for the existing congregation at the subject site, having good access to existing public transport services and where a significant number of the congregation being Muslim residents who live and/or work in the immediate local area.
- The on-site vehicular access, car parking layout and circulation is adequate for the proposed development and in accordance with AS2890.1:2004 and AS2890.6:2009, where vehicles are to enter and exit the site in a forward direction at all times.
- The parking surveys undertaken have indicated the availability of on-street car parking opportunities in the vicinity of the subject site in Mountford Avenue and surrounding streets, where members of the mosque congregation will have no difficulty in obtaining additional on-street parking, if required.

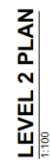
Appendix A – Proposed Development Plans

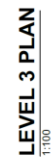


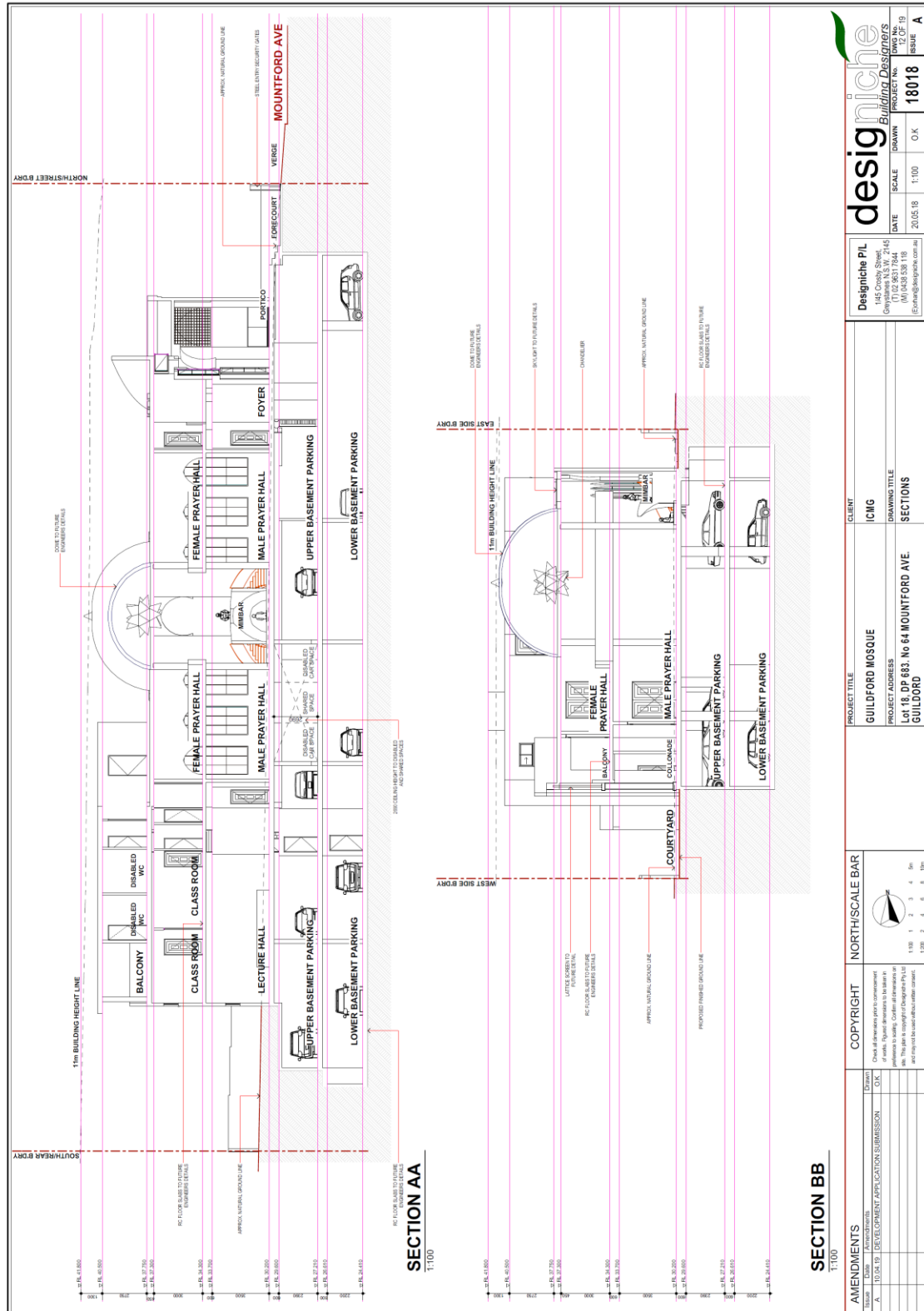












Appendix B – Traffic Volume Counts



Round about at Mountford Ave / Marian Street

ABN 96525873656

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
15 MINS INT	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
11:00-11:15	29	0	0	11	0	2	0	0	8	6	10	0	66
11:15-11:30	38	2	1	11	0	2	8	2	11	17	8	2	102
11:30-11:45	53	4	3	16	4	5	11	1	7	12	8	2	126
11:45-12:00	42	4	1	18	3	7	9	2	9	13	11	2	121
12:00-12:15	37	3	3	22	7	4	6	3	7	10	10	3	115
12:15-12:30	40	1	1	4	4	8	6	1	7	18	6	4	100
12:30-12:45	45	5	2	9	4	2	13	0	9	12	5	7	113
12:45-13:00	50	8	2	16	5	2	6	1	7	16	17	9	139
13:00-13:15	57	9	4	16	2	7	12	0	11	16	23	9	166
13:15-13:30	43	10	4	11	4	7	15	0	10	20	17	7	148
13:30-13:45	37	5	2	10	5	6	6	0	13	11	9	9	113
13:45-14:00	55	3	3	30	11	6	13	6	18	29	20	17	211
TOTAL	526	54	26	174	49	58	105	16	117	180	144	71	1520

PEAK HOUR AM-PM

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
BY HOUR	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
11:00-12:00	162	10	5	56	7	16	28	5	35	48	37	6	415
11:15-12:15	170	13	8	67	14	18	34	8	34	52	37	9	464
11:30-12:30	172	12	8	60	18	24	32	7	30	53	35	11	462
11:45-12:45	164	13	7	53	18	21	34	6	32	53	32	16	449
12:00-13:00	172	17	8	51	20	16	31	5	30	56	38	23	467
12:15-13:15	192	23	9	45	15	19	37	2	34	62	51	29	518
12:30-13:30	195	32	12	52	15	18	46	1	37	64	62	32	566
12:45-13:45	187	32	12	53	16	22	39	1	41	63	66	34	566
13:00-14:00	192	27	13	67	22	26	46	6	52	76	69	42	638
TOTAL	1606	179	82	504	145	180	327	41	325	527	427	202	4545





Cross intersection at Mountford Ave / Talbot Road

ABN 96525873656

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
15 MINS INT	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
11:00-11:15	8	3	8	3	1	0	1	2	0	8	1	3	38
11:15-11:30	6	8	9	3	1	0	10	1	0	17	1	6	62
11:30-11:45	11	3	10	2	2	0	11	6	2	13	1	3	64
11:45-12:00	6	2	12	2	1	0	7	9	0	14	1	8	62
12:00-12:15	4	3	10	2	1	0	9	2	1	14	1	5	52
12:15-12:30	8	6	9	4	0	0	9	6	1	22	1	4	70
12:30-12:45	11	3	7	4	2	0	13	2	3	16	1	3	65
12:45-13:00	10	6	13	1	0	0	5	0	7	27	1	9	79
13:00-13:15	6	4	15	3	3	1	14	9	4	33	1	12	105
13:15-13:30	9	5	17	3	7	2	11	13	7	26	1	3	104
13:30-13:45	9	5	11	4	4	2	5	8	7	19	1	8	83
13:45-14:00	6	4	20	11	12	5	19	12	3	21	1	11	125
TOTAL	94	52	141	42	34	10	114	70	35	230	12	75	909

PEAK HOUR AM-PM

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
BY HOUR	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
11:00-12:00	31	16	39	10	5	0	29	18	2	52	4	20	226
11:15-12:15	27	16	41	9	5	0	37	18	3	58	4	22	240
11:30-12:30	29	14	41	10	4	0	36	23	4	63	4	20	248
11:45-12:45	29	14	38	12	4	0	38	19	5	66	4	20	249
12:00-13:00	33	18	39	11	3	0	36	10	12	79	4	21	266
12:15-13:15	35	19	44	12	5	1	41	17	15	98	4	28	319
12:30-13:30	36	18	52	11	12	3	43	24	21	102	4	27	353
12:45-13:45	34	20	56	11	14	5	35	30	25	105	4	32	371
13:00-14:00	30	18	63	21	26	10	49	42	21	99	4	34	417
TOTAL	284	153	413	107	78	19	344	201	108	722	36	224	2689





ABN 96525873656

Round about at Mountford Ave / Marian Street

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
15 MINS INT	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
15:00 to 15:15	76	2	2	17	14	5	7	0	12	20	16	4	175
15:15 to 15:30	59	2	2	27	14	4	7	1	13	27	13	6	175
15:30 to 15:45	53	1	1	28	8	4	6	3	14	26	18	4	166
15:45 to 16:00	56	4	3	24	8	3	5	0	21	30	17	4	175
16:00 to 16:15	53	4	1	12	9	6	8	7	11	21	12	6	150
16:15 to 16:30	60	1	2	18	6	3	12	1	11	18	19	6	157
16:30 to 16:45	51	4	0	19	5	4	5	0	9	25	18	6	146
16:45 to 17:00	49	3	3	14	5	0	5	3	10	23	15	2	132
17:00 to 17:15	59	1	1	13	4	4	10	2	9	29	6	3	141
17:15 to 17:30	71	2	2	14	3	5	7	1	10	20	13	4	152
17:30 to 17:45	51	1	2	16	4	4	8	5	12	17	9	5	134
17:45 to 18:00	31	5	0	11	2	3	11	2	6	21	9	4	105
TOTAL	669	30	19	213	82	45	91	25	138	277	165	54	1808

PEAK HOUR PM

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
BY HOUR	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
15:00-16:00	244	9	8	96	44	16	25	4	60	103	64	18	691
15:15-16:15	221	11	7	91	39	17	26	11	59	104	60	20	666
15:30-16:30	222	10	7	82	31	16	31	11	57	95	66	20	648
15:45-16:45	220	13	6	73	28	16	30	8	52	94	66	22	628
16:00-17:00	213	12	6	63	25	13	30	11	41	87	64	20	585
16:15-17:15	219	9	6	64	20	11	32	6	39	95	58	17	576
16:30-17:30	230	10	6	60	17	13	27	6	38	97	52	15	571
16:45-17:45	230	7	8	57	16	13	30	11	41	89	43	14	559
17:00-18:00	212	9	5	54	13	16	36	10	37	87	37	16	532
TOTAL	2011	90	59	640	233	131	267	78	424	851	510	162	5456





ABN 96525873656

Cross intersection at Mountford Ave / Talbot Road

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
15 MINS INT	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
15:00 to 15:15	12	0	14	6	0	0	7	6	0	26	1	16	88
15:15 to 15:30	6	2	13	10	4	1	8	4	2	30	5	34	119
15:30 to 15:45	11	8	19	11	0	1	5	5	0	24	0	18	102
15:45 to 16:00	12	6	13	10	0	1	7	5	0	34	1	24	113
16:00 to 16:15	9	3	16	5	0	1	13	5	2	29	1	8	92
16:15 to 16:30	7	7	19	2	1	1	7	5	1	25	1	16	92
16:30 to 16:45	17	5	17	5	1	0	12	4	2	29	1	8	101
16:45 to 17:00	6	7	10	3	1	0	6	1	0	30	1	6	71
17:00 to 17:15	8	4	5	2	3	1	18	0	0	30	0	8	79
17:15 to 17:30	7	6	10	1	1	0	8	3	2	26	1	7	72
17:30 to 17:45	6	4	12	5	2	0	11	4	1	20	0	9	74
17:45 to 18:00	6	3	0	5	3	4	29	2	5	10	3	3	73
TOTAL	107	55	148	65	16	10	131	44	15	313	15	157	1076

PEAK HOUR PM

Time	NB	NB	NB	SB	SB	SB	WB	WB	WB	EB	EB	EB	
BY HOUR	THRU	L	R	THRU	L	R	THRU	L	R	THRU	L	R	TOTAL
15:00-16:00	41	16	59	37	4	3	27	20	2	114	7	92	422
15:15-16:15	38	19	61	36	4	4	33	19	4	117	7	84	426
15:30-16:30	39	24	67	28	1	4	32	20	3	112	3	66	399
15:45-16:45	45	21	65	22	2	3	39	19	5	117	4	56	398
16:00-17:00	39	22	62	15	3	2	38	15	5	113	4	38	356
16:15-17:15	38	23	51	12	6	2	43	10	3	114	3	38	343
16:30-17:30	38	22	42	11	6	1	44	8	4	115	3	29	323
16:45-17:45	27	21	37	11	7	1	43	8	3	106	2	30	296
17:00-18:00	27	17	27	13	9	5	66	9	8	86	4	27	298
TOTAL	332	185	471	185	42	25	365	128	37	994	37	460	3261



Appendix C – Vehicle Swept Paths

