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Lot 424 / 425 Accomplish Way Gnangara

Existing Temple and Cultural Centre
Transport Impact Statement

PREPARED FOR:
Shree Jalaram Mandal of
WA

March 2024

Document history and status

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Author: Roger Bajwa

Project manager: Mohammad Rasouli

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1 Introduction

This Transport Impact Statement (TIS) has been prepared by Transcore on behalf of Shree Jalaram Mandal of WA with regard to the proposed amendment to the place of worship and assembly at Lot 424 / 425 Accomplish Way, Gngangara.

It is understood that the place of worship and assembly has been approved and is currently operational. However, an amendment is proposed to allow the visitations to the place of worship and assembly to increase to 500 people at any one time. It is acknowledged that the 500 visitations are expected to occur occasionally and would not be a regular event.

The subject site is located at the south-eastern corner of the intersection of Accomplish Way and Forward Street as shown in **Figure 1**.

The Transport Impact Assessment Guidelines (WAPC, Vol 3 – Subdivisions, August 2016) states “A *Transport Impact Statement* is required for those subdivisions that would be likely to generate moderate volumes of traffic¹ and therefore would have a moderate overall impact on the surrounding land uses and transport networks”. In accordance with the information provided in Section 6 of this report, a Transport Impact Statement is the appropriate level of assessment for this proposal.



Figure 1: Location of the subject site

¹ Between 10 and 100 vehicular trips per hour

2 The Proposal

The proposal is for using the existing building located at Lot 424 / 425 Accomplish Way Gngara as a “temple and cultural centre” for a place of assembly and worship. The site has been developed recently and consists of a temple and multi-use hall / cultural and community centre which is being used by the members of the Shree Jalaram Mandal WA (SJMWA) and wider community.

Currently, there is an existing patron limit of 244 individuals set by the current planning approval, however, the SJMWA is seeking approval for an increased capacity of 500 persons.

Accordingly, an amended development site plan is prepared by SJMWA for the subject site which is provided in **Appendix A**. The amended development site plan incorporates the following key elements:

- A main hall with a seating capacity of 117 persons;
- A dining area with kitchen;
- A sealed car parking area with 52 parking spaces; and,
- Seven off-street parking bays.

The site will function as a venue for religious worship and community gatherings. The main events are scheduled to take place on Thursday nights and the second Sundays of each month, with an expected attendance ranging from 150 to 350 individuals per event. In addition, the facilities will be open for rental to the wider community for cultural functions and events. These external events are likely to be held mainly in the evenings or on weekends, accommodating approximately 390 to 500 people at any given time. It is anticipated that the maximum attendance of 500 people will occur occasionally and not regularly.

3 Vehicle Access and Parking

Vehicle access to the site is via an entry crossover on Accomplish Way and egress is via an exit crossover on Forward Street as shown in **Figure 2**.



Figure 2: Development access points

The development comprises 52 on-site parking bays including two disabled bays.

According to the City of Wanneroo District Planning Scheme No.2 the parking provision of a place of worship is 1 space for every 4 persons at the facility.

The Place of Worship is proposed to accommodate a maximum seating capacity of 500 persons, and as such, will require a total of 125 parking bays.

In addition to the proposed 52 on-site bays, as part of this proposal, it is proposed to mark up at least 46 on-street parking bays on adjacent roads as per the plan in **Appendix B**. Additionally, it is understood that three neighbouring properties have agreed to allow their on-site parking bays (totalling 42 bays) to be used by the temple's patrons during peak visitation times of evenings and weekends (see **Appendix C** for the letters of agreements).

Therefore, a total of approximately 140 parking bays (52 on-site, 46 on-street, and 42 neighbour bays) would be available for use by temple patrons, which is expected to adequately address the parking requirements of the site during major events.

It should be noted that a reasonable number of patrons are likely to carpool in mini vans or use ride-sharing services such as Uber or taxis to reach the site. Consequently,

the actual parking demand for the site is likely to be lower than what is required in the City of Wanneroo District Planning Scheme No.2.

Since the main activities will occur outside of business hours and mainly over the weekends for social, cultural, religious gatherings, and other community activities, the off-street and neighbour on-site parking bays would be accessible and available to the patrons.

Considering these factors, including the availability of off-street and neighbours off-street parking, the overall parking provision is deemed sufficient to accommodate the anticipated parking demand of the proposal.

4 Provision for Service Vehicles

Service and waste collection will use the internal driveway and car park area to undertake deliveries or waste collection during times of very low demand for parking bays as per the existing situation. The existing one-way internal driveway allows the relevant service and waste collection vehicles to easily access the necessary areas within the site.

The loading and waste collection activity would mainly occur at the double door entrance near the kitchen area which will be easily accessed by the internal driveway.

5 Hours of Operation

The hours of operation during weekdays are 7:00 AM to 10:30 AM and 4:30 PM to 8:00 PM. The temple operates in the same manner as a community centre and mostly has functions and events during weekends or outside normal business hours. It is anticipated that there will be minimal activities during the business hours from 7 AM to 6 PM Monday to Friday.

The regular peak operating periods of the facility are on Thursday nights and the second Sunday nights of every month when the SJMWA holds its prayer service.

6 Daily Traffic Volumes and Vehicle Types

6.1 Existing Development Trip Generation

The existing temple generates its highest traffic volumes on Thursday nights and the second Sunday nights of every month when the SJMWA holds its prayer service. During Thursday nights and the second Sundays of every month between the hours of 6:00 pm to 9:00 pm, the property is expected to be occupied at 70% to 100% of the capacity. Currently, the capacity of the facility is limited to 244 persons by the current planning approval.

It is anticipated that the highest traffic volumes generated by the existing facility will align with the assumptions made for parking requirements, which is one car per four seats. However, it should be noted that according to SJMWA, a portion of the patrons will utilize SUVs and passenger vans, with an average occupancy of 8 people per vehicle. For the existing maximum 244 people capacity, assuming that 30% of the patrons will use SUVs and passenger vans, approximately 73 individuals would arrive or depart using 10 SUVs or vans ($73/8 = 9.13$).

During the 6:00 pm Sunday or Thursday service, it is estimated that inbound traffic flows will consist of approximately 43 vehicles ($171/4 = 42.75$ cars) and 10 SUVs and passenger vans within the half hour to one hour prior to the service. Similarly, it is anticipated that around 53 vehicles (43 cars and 10 SUVs and vans) will exit the site within half an hour to one hour after the service concludes at 9:00 pm.

6.2 Proposed Development Trip Generation

The SJMWA seeks approval for 500 persons. Using the same assumptions for estimating the existing highest trip generation of the facility with 244 persons capacity, would result in the highest trip generation of the facility with 500 persons capacity to be about 19 ($150/8 = 18.75$) SUVs and passenger vans and 88 passenger cars ($350/4 = 87.5$) or a total of 107 vehicles.

As a result, the net traffic increase as a result of the proposal is estimated to be 54 vehicles (mainly inbound) within one hour prior to the service starting time at 6:00 pm and 54 vehicles (mainly outbound) within one hour after the service concludes at 9:00 pm. This level of traffic increase is anticipated to only occur during major events and can be comfortably accommodated by the surrounding road network.

It is important to note that these assumptions are conservative and do not account for other modes of transportation such as ridesharing like Uber. Additionally, major events that would reach the full capacity of 500 persons are expected to occur occasionally rather than frequently.

Considering that in total about 140 parking bays (on-site, on-street and on neighbour's land) would be available to the temple patrons, the absolute maximum anticipated 107 vehicles can be accommodated.

6.3 Impact on Surrounding Roads

The WAPC *Transport Impact Assessment Guidelines* (2016) provides the following guidance on the assessment of traffic impacts:

“As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis.”

The capacity increase of the existing temple to 500 persons will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph per lane to warrant further detailed analysis. Therefore, the impact of the proposal on the surrounding road network will not be significant.

7 Traffic Management on the Frontage Streets

Accomplish Way, north of the subject site is an undivided single-lane road. According to the Main Roads WA “Metropolitan Functional Road Hierarchy”, Accomplish Way is classified as an Access Road.

The default build-up area speed limit of 50 km/h is applied to Accomplish Way. **Figure 3** shows the Accomplish Way in the vicinity of the subject site. Accomplish Way intersects with Forward Street as a priority-controlled T-intersection.



Figure 3: Accomplish Way looking west in the vicinity of the subject site

Forward Street is a single-lane two-way road which forms the western boundary of the site. It is classified as an Access Road in Main Roads WA “Metropolitan Functional Road Hierarchy” and operates under the default 50km/h speed limit (refer **Figure 4**).



Figure 4: Forward Street looking north in the vicinity of the site

8 Public Transport Access

The closest existing bus services to the subject site are Transperth bus routes 355 and 376.

The nearest bus stops are located on Ocean Reef Road approximately 740m walking distance from the subject site. (refer **Figure 5**).

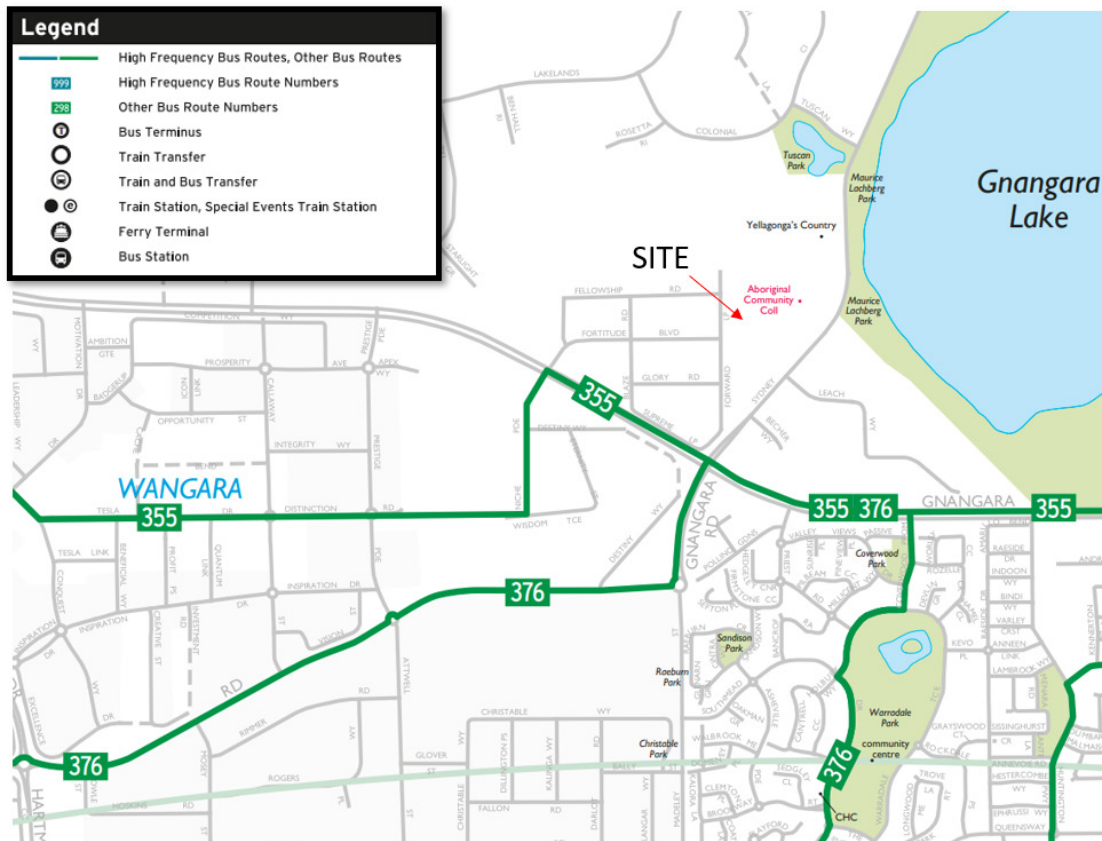


Figure 5: Existing bus routes

9 Pedestrian and Cycle Access

Pedestrian and cycle access to the subject site is via the existing shared paths along Ocean Reef Road and Sydney Road. Also, cycle lanes are in place on Sydney Road. (refer **Figure 6**).

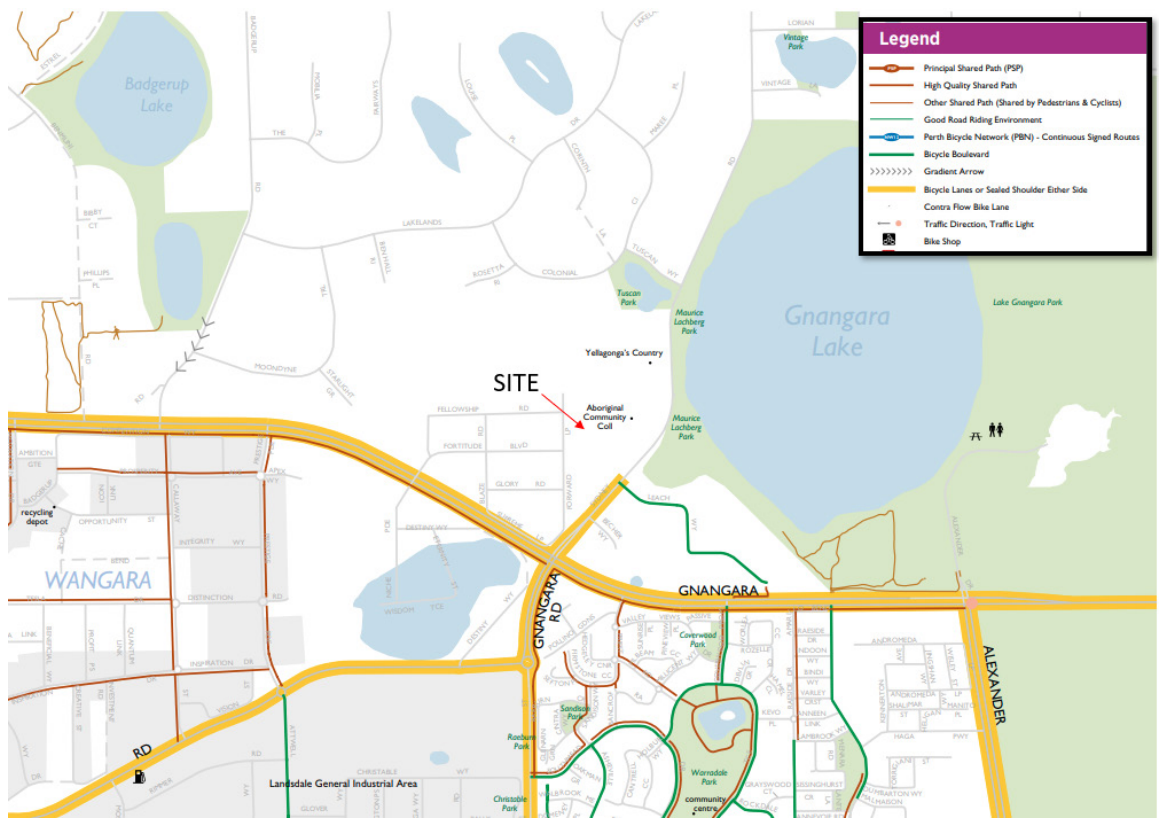


Figure 6: Extract from Perth Bicycle Network (Department of Transport)

10 Site Specific Issues

Other than the proposed parking supply for major events, no other specific issues were identified within the scope of this assessment.

11 Safety Issues

No safety issues were identified within the scope of this assessment.

12 Conclusions

This Transport Impact Statement (TIS) has been prepared by Transcore on behalf of Shree Jalaram Mandal of WA with regard to the proposed amendment to the place of worship and assembly at Lot 424 / 425 Accomplish Way Gnangara.

The proposal is for using the existing building located at Lot 424 / 425 Accomplish Way as a “temple and cultural centre”. The site has been developed recently and consists of a temple and multi-use hall / cultural and community centre which is being used by the members of the Shree Jalaram Mandal WA (SJMWA) and wider community.

Although the facility has a patron limit of 244 persons by the current planning approval, the SJMWA seeks approval for 500 persons. It is acknowledged that the 500-person events are expected to occur occasionally and would not be a regular event.

The parking requirement of the facility for the proposed absolute maximum of 500 persons capacity during the major events is proposed to be addressed by 52 on-site bays, at least 46 on-street bays and a total of 42 bays from the adjacent business (Caledonia Group, Ward Packaging and Forth Australia).

The highest trip generation of the temple's regular activities is anticipated to be on Thursday nights and the second Sunday nights of every month. The occasional major events with a maximum capacity of 500 persons are anticipated to occur in the evenings but mainly at the weekends. The traffic analysis undertaken in this report shows that the traffic generation of the temple is relatively low and would not have a material impact on the surrounding road network.

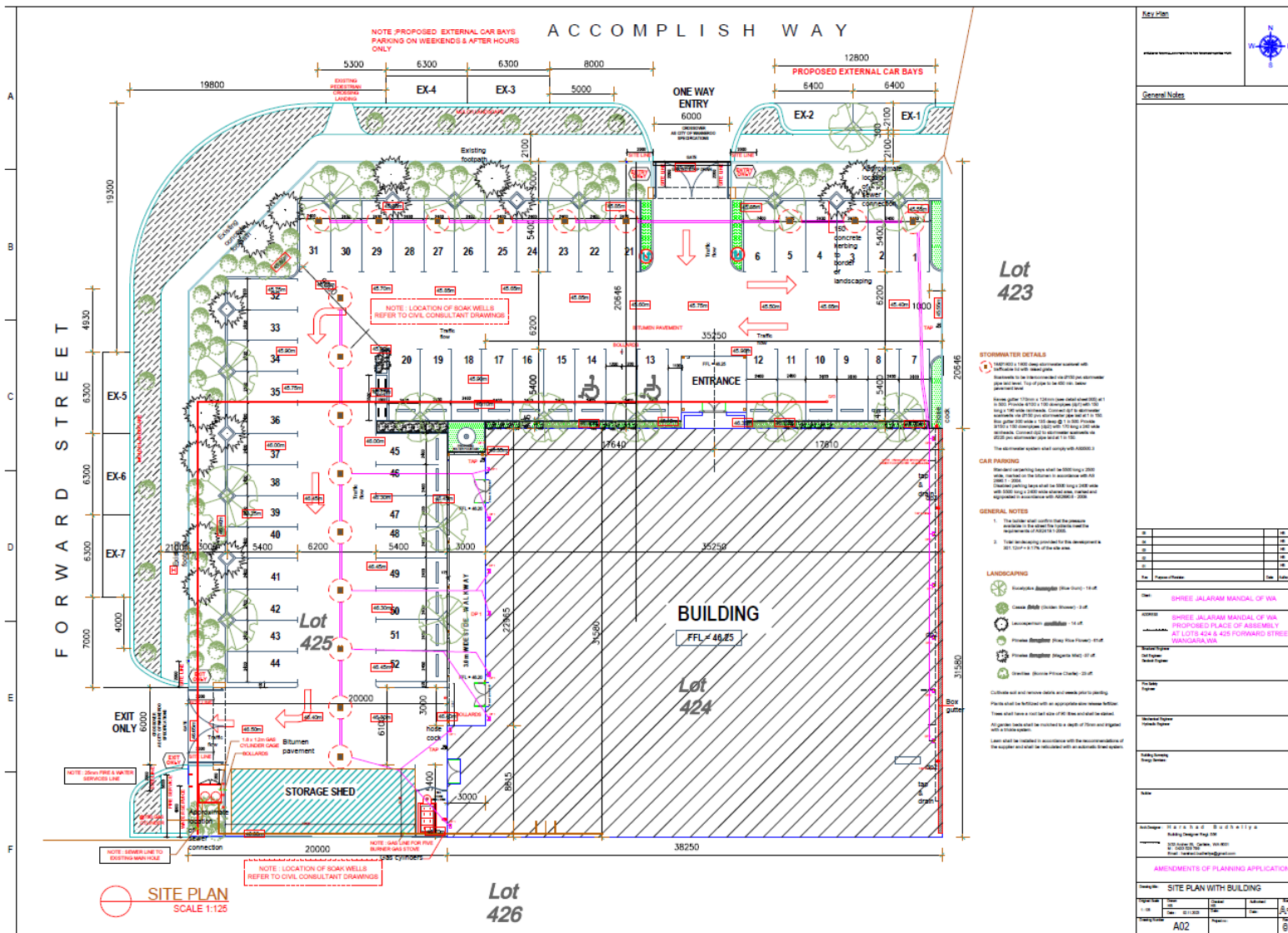
The net traffic increases due to the increase in the capacity of the facility from 244 persons to 500 persons is estimated to be only 54 vehicles. This level of increase in traffic is expected to be marginal and would happen only during major events.

No particular safety issues have been identified for the proposal. It is therefore concluded that traffic-related issues should not form an impediment to the approval of the proposed development.

Appendix A

DEVELOPMENT SITE PLAN





Appendix B

ON STREET BAYS ON ABUTTING ROADS



Appendix C

LETTERS OF AGREEMENT

