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Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

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Reference: 16575.07FA

Artazan Property Group
Level 8,
210 George Street,
Sydney, NSW 2000
Attention: Cian Fitzgerald

LETTER RESPONSE TO NORTH SYDNEY COUNCIL WITH REGARD TO THE LORETO KIRRIBILLI SCHOOL AT 85 CARABELLA STREET, KIRRIBILLI

Dear Cian,

Reference is made to your request to provide a response to the comments provided by North Sydney Council with regards to the State Significant Development Application for the proposed staged development of the Loreto Kirribilli School. A response to each of the points raised by North Sydney Council is provided below. This letter should be read as an addendum to the Traffic and Parking Impact Assessment dated 25 July 2017 by M^CLaren Traffic Engineering.

Each of the comments from North Sydney Council is reproduced in *italics* and responded to thereafter in the following sections.

1 Drop-Off/Pick-Up Facilities

- 1. That the School be required to review the operation of the existing drop off and pick up facility and include a reconfiguration of the drop off and pick up facility to ensure that all queuing occurs within the School site and not onto the public road, as part of the proposed development.*

The above comment from North Sydney Council can be broken down into two items:

- That a review of the existing drop-off/pick-up operations is undertaken; and
- That an on-site drop-off/pick-up facility be provided with the capacity for the maximum number of queued vehicles currently experienced.

A response to each of these comments is provided in the following subsections. With respect to student numbers, the primary intent of the Concept Proposal is to provide flexible space for existing students in line with the modern-day teaching methods and standards at a rate of 3sqm per student. Whereas schools increasing student numbers can access capital grants through the Association of Independent Schools, Loreto Kirribilli's intent to maintain their existing enrolment patterns is evidenced by the fact that the school is not applying for any capital grants to fund the project.

It has been advised by the School that the current student population is 1096 students and that the maximum future occupancy of the school under the proposal is 1116 students, an increase of just 20 students.

1.1 Provision of On-Site Drop-Off/Pick-Up Facilities

It should be noted that the provision of on-site kiss and drop facilities will result in an increased proportion of parents electing to drop-off and pick-up their children, increasing the total traffic generation of the school. It is likely that the addition of on-site kiss and drop facilities alone would increase the traffic generation of the school by a much greater level than the existing proposal, as it would encourage the parents of *existing* students to drive.

Considering that North Sydney Council's previous position with regards to reducing staff parking was based on the desired reduction of traffic generation, the provision of on-site kiss and drop facilities seems counter to the desired outcomes of Council and it would be beneficial to discuss this aspect of the request for on-site kiss and drop facilities to a greater degree.

Irrespective of the potential negative impacts on the wider traffic network, in anticipation of the request for on-site kiss and drop facilities options for the provision of on-site facilities have been considered by the Architect and the School, with the result being that it is physically and operationally impossible to provide the facilities requested by Council for the following reasons:

- Heritage and landscaping factors which restrict the addition of driveways or alteration of structures along both street frontages of the school;
- The physical and regulatory constraints of the site.

Plans illustrating the constraints of the site have been produced and are reproduced in **Annexure A**.

An assessment of the physical nature of the site and the existing site parking facilities has been conducted from a traffic and parking perspective to establish the opportunities and constraints for the site in providing on-site kiss and drop facilities, with the results summarised in the following sub-sections.

1.1.1 Physical Constraints of Site

The Loreto Kirribilli site is extremely steep, with a difference of approximately 20m of elevation between the Carabella Street and Elamang Street frontages. In addition, any on-site facilities would require extra driveway crossings, resulting in the loss of on-street parking and creating additional points of conflict.

Through a consideration of the numerous traffic, heritage, environmental, topological and planning factors affecting the site, it has been concluded that the addition of an on-site kiss and drop facility is impossible.

1.1.2 Constraints of Existing Car Parking Facilities

The use of the existing school car parking facility off Elamang Avenue for kiss and drop operations has been discussed but is not considered to be an appropriate option for a number of reasons including:

- The existing car parking area is a service area for the site and is generally unsuitable for children on a number of safety grounds including:
 - Lack of safe area in which to wait;

- Air quality concerns;
- Use of this car parking area for deliveries and waste collection operations.
- The entrance and particularly the exit of the car park are unsafe for use by parents, as demonstrated by **Figure 1**, which depicts the sight distance available to drivers exiting the car park;
- Staff would be entering and departing during peak drop-off and pick-up hours and cannot be prevented from doing so under the current independent teachers multi-enterprise agreement (MEA);
- That, as discussed above, any provision of facilities on-site will result in an increase in traffic generation;
- The existing (and increased) traffic generation will be relocated to Elamang Avenue;
- There is not sufficient length within the car park to accommodate the entire queue of vehicles and the overflow onto the street would have the same impact as the current operations of the site.



FIGURE 1: DRIVER SIGHT DISTANCE AT EXISTING CAR PARK EXIT

1.2 Review of Drop-Off/Pick-Up Operations

1.2.1 Existing Operations

A site visit was undertaken on 1 May 2018 in the afternoon to examine the existing operations of the school during pick-up times. In the experience of *McLaren Traffic Engineering*, the pick-up operations of a school have a larger impact on the local traffic network than drop-off operations and for the purposes of this advice, a morning site visit was not necessary.

The pick-up operations along the Carabella Street site frontage were observed during the site visit on 1 May 2018 between the times of 2:40 pm and 3:35 pm. The following relevant notes were made:

- Parents were waiting in the pick-up zone at 2:40 pm when I arrived at the site, with the surrounding area at a very high level of parking occupancy.
- The pick-up operations are well managed by teaching or other staff and are efficient, in that Children are quickly loaded into their parents' vehicles upon their arrival in the signposted area along Carabella Street;
- The limited length of the sign posted pick-up area, with capacity for approximately six cars, is the limiting factor for the pick-up operations;
- Parents were observed to queue in Carabella Street, effectively blocking two-way traffic flow (due to the narrow width of Carabella Street) between approximately 2:50 pm and 3:20 pm.
- During this time when traffic flow was constrained, it was not observed that any traffic attempted to travel north on Carabella Street, all traffic heading north made a left turn at Fitzroy Street.
- No buses were observed to pick up students along the Carabella Street frontage, though two buses (Route 269) were observed travelling north along Carabella Street between 2:40 pm and 3:35 pm.
- A total of 85 vehicles were observed to pick up students between 2:55 pm and 3:25 pm.
- The pedestrian crossing was controlled by a traffic controller from 2:50 pm until 3:45 pm.
- Due to the traffic queues extending north in Carabella Street, the traffic flow in the road was not inhibited by the crossing operations, despite the lollypop man stopping traffic approximately once a minute.

Subsequent to the site visit it has been noted that some senior students were present at the pick-up facility, which is intended as a junior-school-only operation.

1.2.2 School Initiatives

The school is committed to improving the existing function of the drop-off and pick-up and has committed to the following initiatives:

- A new permit system will be implemented, whereby parents will be provided with a card to display in their windshield in order to inform teaching staff on duty of which student is being picked-up by that vehicle. These cards will be provided only to junior school parents and vehicles without a card will not be permitted to pick-up a child. Senior students will not be provided with these cards and will be unable to be picked up from Carabella Street.
- The school has recently hired traffic wardens to control traffic along both Carabella and Elamang Streets. A role description for these wardens is provided in **Annexure B**. The traffic wardens will prevent parents from double parking and undertaking unsafe U-turns and will provide traffic control where required to ensure the safe operation of the two roads for both drivers and pedestrians.
- The lollypop man has recently been granted permission by the police to act as a traffic controller in addition to his duties controlling the operations of the pedestrian crossing. Where necessary he will direct traffic to alleviate blockages in Carabella Street.
- The school will author a formal management plan detailing all the initiatives in place both the discourage the use of private vehicles and to manage the impacts of drop-off and pick-up operations.

1.2.3 Impact of Proposed Initiatives on Existing Operation

It is anticipated that the implementation of the initiatives described in **Section 1.2.2** will have the following effects on the operation of the drop-off and pick-up operations of the school:

- The implementation of the permit system will cause a net reduction in vehicles utilising the existing pick-up zone along Carabella Street and reduce or eliminate traffic queues in Carabella Street;
- The addition of suitably qualified traffic wardens to both Elamang Avenue and Carabella Street will increase the traffic flow efficiency and safety of both roads;
- The implementation of a management plan will result in a lower overall private car usage and reduce the impact of the school on the surrounding road network.

1.2.4 Impact of Proposed Development on Existing Operations

Considering that the purpose of the proposed development is to improve the facilities of the school with regards teaching outcomes and that there is no change proposed to the enrolment pattern of the school, it is unlikely that there will be any noticeable impact on the everyday pick-up operations of the site.

In addition, it should be noted that any additional students will be senior students. As previously noted, senior students will be prevented from using the existing drop-off and pick-up zone along Carabella Street and will have no impact on the existing everyday pick-up operations of the site.

2 Recommendation

In summary, the school is committed to improving the drop-off and pick-up operations of the site as a result of the proposed development. Whilst consideration has been given to the provision of kiss and drop facilities on-site, it is impossible to achieve due to the constraints of the site.

Please contact Tom Heal or the undersigned on 02 8355 2440 should you require further information or assistance.

McLaren Traffic Engineering



Tom Heal

Traffic Engineer

BE Civil AMAITPM GradIEAust

RMS Accredited Level 1 Road Safety Auditor

RMS Accredited Work Zone Traffic Management Plan Designer and Inspector



ANNEXURE A: SITE CONSTRAINTS

Internalised Pick-up and Drop-off
Options Analysis

Loreto Kiribilli Concept Master plan
Site Plan

▲ Vehicular Entry / Exit Points

Carabella Street

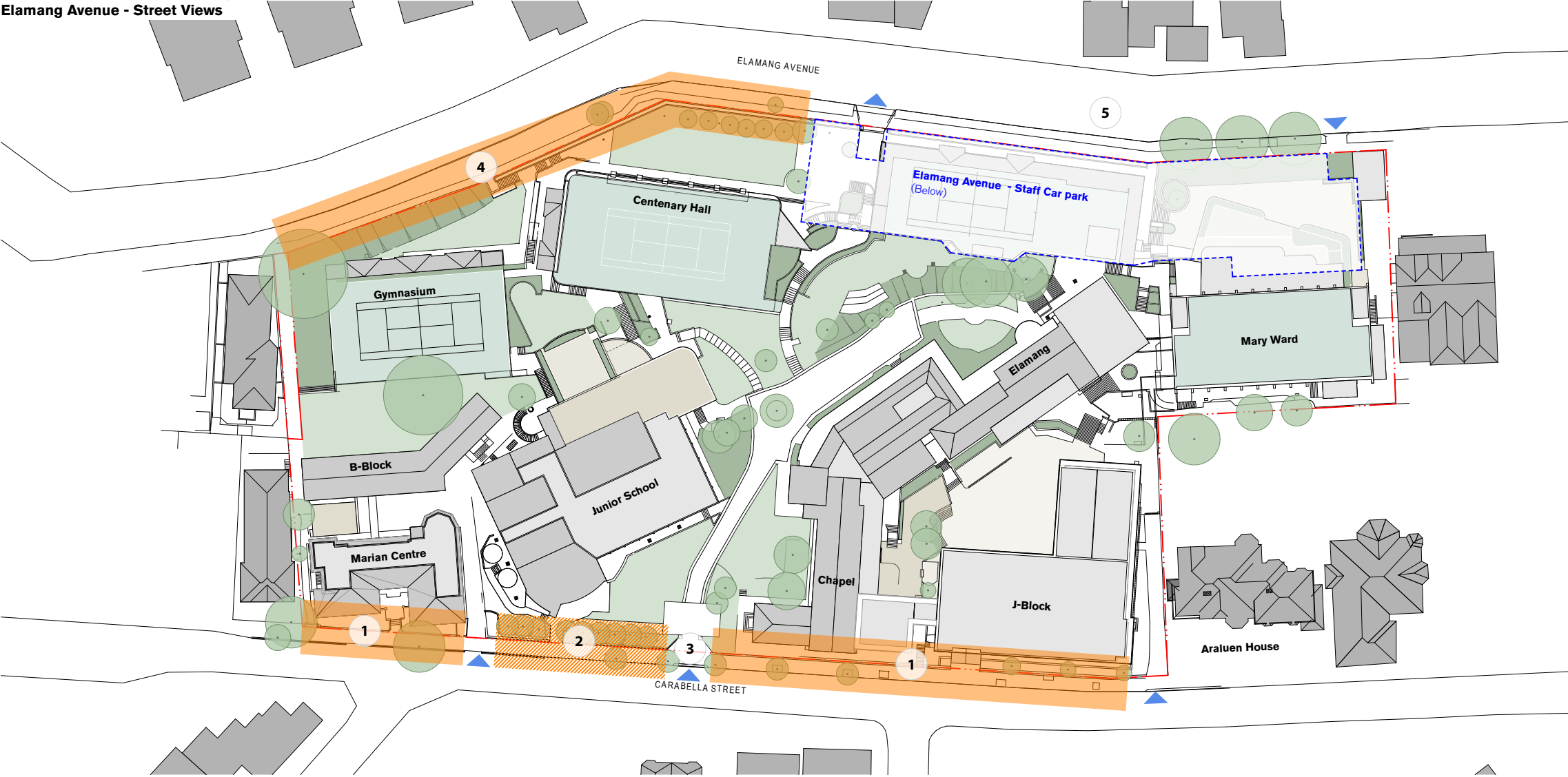
- 1
- Location of existing built form restricts the opportunity for alteration of street frontage.
- 2
- Line of mature trees along the Carabella Street boundary and mature external street trees inhibit the opportunity for alternations along this frontage.
- 3
- Main entry driveway is the main pedestrian entry/exit into the site. It is currently used for intermittent vehicular access for loading and service vehicles only (outside of student movement times). This would not be suitable for pick up and drop off as it is not possible to accomodate a drive through alternate exit point, alterations are restricted by the surrounding heritage built forms. It will also conflict with the major pedestrian entry/exit.

Elamang Avenue

- 4
- The topography of the northern boundary at the interface between the boundary and Elamang Avenue inhibits vehicular access along this frontage.
- 5
- The staff carpark off Elamang Avenue is the only opportunity on the site where vehicles are able to enter, drive through and exit the site. Refer to drawing SK.02 outlining the constraints of utilising the existing car park for this operation.



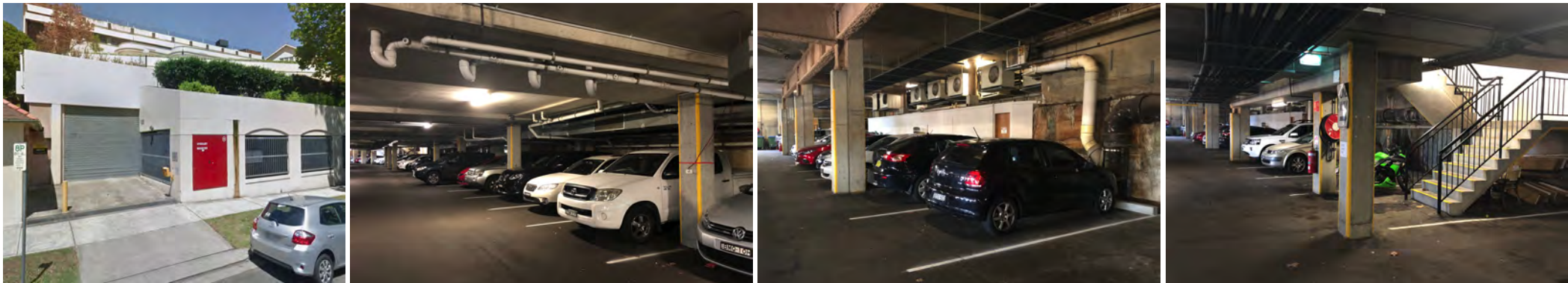
Elamang Avenue - Street Views



Carabella Street - Street Views

Internalised Pick-up and Drop-off
Options Analysis

Loreto Kiribilli Concept Master plan
Stage 1 Master plan - Car park Plan



Constraints

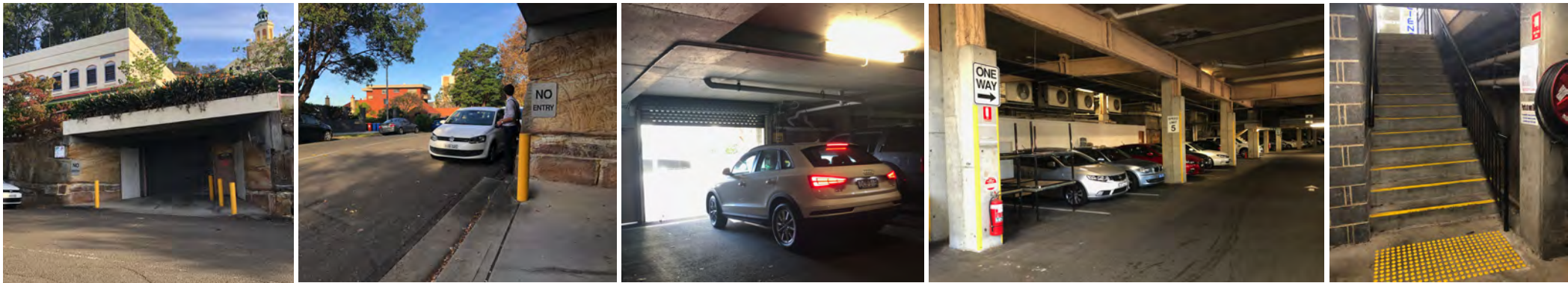
1 The existing car parking area is a service area of the site and is generally unsuitable for student access on a number of safety grounds including:

- It is a confined space which inhibits a safe shared pedestrian and vehicular environment.
- Poor visibility due to the low ceiling heights, column and service obstructions.
- Inability to provide a safe and large enough student waiting area.

The entrance and particularly the exit of the car park are unsafe for use by parents, there is restricted visibility due to the existing on street car parking.

Staff would be entering and departing during peak drop-off and pick-up hours which would therefore inhibit the operation of pick up and drop off within the carpark. This is unable to be restricted under the current Independent Schools Multi Enterprise Agreement (MEA)

There is insufficient length within the car park to accommodate the entire queue of vehicles required. Due to limited capacity, a carline would be required with potential queues onto the street and over the footpath.





ANNEXURE B: TRAFFIC WARDEN ROLE DESCRIPTION



TRAFFIC WARDEN

Role Description

The Traffic Warden is responsible to the Principal for ensuring that traffic control is implemented where required to ensure the safe operation of Carabella Street and Elamang Avenue. Support of the Catholic ethos of the school is reflected in the role.

KEY AREAS OF RESPONSIBILITY

1. Support for a Cohesive School Community
2. General Duties
3. Hours

1. SUPPORT FOR A COHESIVE SCHOOL COMMUNITY

Assist in the continuing development of a culture that is in harmony with Catholic tradition, the charism of Mary Ward and the heritage of Loreto.

- 1.1 Encourage and support the growth, appreciation and acceptance of the values and beliefs of the Catholic Church.
- 1.2 Gives personal witness to these values in carrying out daily duties.
- 1.3 Support the policies and procedures that realise the goals of the Loreto Schools of Australia Mission Statement.
- 1.4 Provide support and loyalty to the Principal.
- 1.5 Support the prayer and liturgical life of the School.

2. GENERAL DUTIES

- 2.1 Perform traffic control along both Carabella Street and Elamang Avenue.
- 2.2 Ensure that parents are prevented from double parking and undertaking unsafe U-turns.
- 2.3 Ensure that the parking regulations are adhered to.
- 2.4 Ensure the safe operation of Carabella Street and Elamang Avenue for both drivers and students.
- 2.5 Monitor the flow of traffic to remain continuous.

3. HOURS

Monday-Friday	8.00am to 8.45am
	2.30pm to 4.00pm

Student Term- time only