

# case study;

# MLC School, Burwood

Redesigning the pick-up and drop-off scheme

September 2019

parking; traffic; civil design; wayfinding; Ptc.

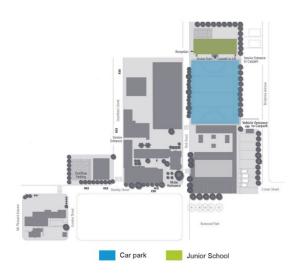
# **Background**

MLC School is a Uniting Church independent girls' school. Founded in 1886, the school has been a pioneer in girls' education by valuing academic and co-curricular activities equally and has a tradition of academic excellence.

Located approximately 12 kilometres west of Sydney CBD in Burwood, MLC serves 1,200 students from pre-kindergarten to Year 12.

#### The brief

At MLC campus, the pick-up and drop-off area of pre-kindergarten to Year 5 students is located at the car park under the hockey field (blue area on the map below). From this area, students have direct access into the Junior School (green area).



MLC engaged **ptc.** to identify opportunities to improve the existing pick-up/drop-off scheme. The key guideline of the project was to maintain the safest environment for the children.

#### Research and analysis

Our team conducted a revision of the existing traffic management arrangements, traffic flow and car park layout.

The first step was a site visit to observe:

- Drivers and pedestrians' behaviour
- Traffic flows
- Dwell time
- Queue length
- Existing traffic management arrangements
- Wayfinding and signage.

Recordings from the car park CCTV were surveyed to obtain an accurate dwell time and identify peak periods for the pick-up and dropoff.

The data collection stage of the project also involved the distribution of an online questionnaire. Data on students' travel mode share and other elements affecting the pick-up/drop-off scheme was collected.

The analysis stage of the study enabled our team to estimate the number of spaces required to accommodate the different user groups of the car park:

- Parents/Guardians (Drop-off/pick-up)
  - Park & Escort the parent/guardian parks and escorts the student to the school or car.
  - Park & Assist (Kiss & Drop) the parent/guardian parks and the student is assisted in or out of the car by a member of staff.
  - Park & Walk the parent/guardian parks and the student walks to the school or the car unassisted.
- Staff
- Visitors

## The solution

The recommendations covered the following aspects:



#### Traffic flow and user group allocation

The car park traffic flow and the designation of parking spaces per user group were altered to distribute the traffic in different areas of the car park.

Now, drivers using the Park & Walk and the Park & Escort schemes can circulate only in a particular section of the car park. See plan on next page.

#### Pedestrian walkway

To assist students with selecting the safest route around the car park pedestrian walkways were painted throughout the facility.

#### Red carpet area

The Park & Assist area now includes 4 bays, one more than in the original design. The bays are numbered and clearly marked and drivers can easily see where to stop. This ensures optimal utilisation of the space as it reduces the number of drivers parking between bays.

To assist the students, five members of staff are present during the drop-off and pick-up times. During the drop-off, one staff member acts as an 'MC' calling forward the students when their parent/guardian is on approach to the red carpet.

The other four staff, each manning a bay, assist the students in and out of the vehicle. This removes the need for the driver to exit the car, thus speeding up the overall process.

#### Communication & Wayfinding

The path to the Park & Walk and Park & Assist areas have been painted in red and green respectively as well as new signs to guide drivers.

We also prepared a brochure which informed parents of the changes in the car park and the pick-up/drop-off scheme.

#### Implementation

The new linemarking and signage were installed during school holidays in preparation for the next term.

The school also adopted educational measures, such as putting notes in cars parked in the wrong bays.

#### The feedback

The solutions achieved positive results on many different fronts:

- Easy to follow traffic flow & minimisation of conflict points
- The new linemarking and signage made it clear to drivers which way to go depending on which type of pick-up/drop-off they expected to do.
- This reduced the need for drivers to circulate in the areas designated for the Park & Assist scheme.
- Minimising conflict points and simplifying the traffic flows enhanced the overall user experience.





1. Before and After - Pick-up/Drop-off area

Our post-implementation observations indicated a reduction of non-compliant behaviour. No doubled parked cars were found during our visit.

Clear separation of the user groups and providing an efficient alternative for those willing to Park & Escort or Park & Walk delivered a positive outcome. The introduction of marked pedestrian pathways and the reduction in non-compliant behaviour increased pedestrian safety in the car park.



2. Linemarking



3. Pedestrian pathway and linemarking

# **Project Snapshot**

### Client

MLC School

# Services provided

- Traffic flow design
- Traffic management
- Car park layout review
- Car park linemarking
- Communication and wayfinding

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ptc.

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