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Re: My revised calculation of the Bellevue Hill Public School afternoon peak period traffic and parking demand

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Dear Ben,

This letter provides the outline of my revised calculation of the School current afternoon peak period traffic and parking demand from 550 to 620 students.

The figure of 550 students was based on figures from 2014. Updated figures provided by the school confirm that there were 620 students in April 2015 at the time the parking observations were undertaken.

This letter also provides updated calculations based on further details of the proposed Green Travel Plan for the school.

### **Future School Traffic Management Principles**

In the Council's assessment report for the development, the Council staff have observed that the current legal maximum parking or waiting time in a "No parking" zone is 3 minutes and the current observed problems with the school afternoon peak pick up traffic are essentially a result of the car drivers in the school car pick up line being either unaware of or unwilling to comply with the signposted parking restrictions. Also these restrictions are not been effectively enforced by the Council parking rangers and/or NSW police currently. It is noted that there is not an issue during the morning 'drop-off' period as 'drop-off' is spread over a longer period of time than afternoon 'pick up'. The 'drop off' is also more instantaneous compared with the 'pick up' as parents tend to wait longer in their vehicles during the 'pick-up'.

Current queuing during the afternoon 'pick-up' period for 15 minutes, between 3:15pm and 3:30pm has a car queue of up to 32 cars.

The traffic queue situation primarily occurs currently because a certain number of the school parents/carers typically arrive early (up to half an hour early) in the afternoons such that the school access road, on the main day of my traffic observations, was effectively parked out by stationary vehicles (in contravention of the maximum 3 minute parking time limit for a No Parking zone) by 2.58 pm, at least 15-20 minutes before the actual school finish time of 3.15 pm.

An education program shall be implemented for the school parents and carers whom intend to use a motor vehicle to drop off or collect their child from the school as part of the enrolment process.

The form of this will be a briefing session held at the school each term for prospective new parents, which would include a briefing and presentation by a NSW Police community representative on the current NSW

Road Rules for traffic and parking, with particular emphasis on how these rules apply to the school drop off and pick up traffic flow at a school such as Bellevue Hill.

The parents/carers will be asked to sign an attendance sheet to confirm their attendance and commitment to comply with all applicable NSW Road Rules, when using a motor vehicle to drive their child to or from school.

This measure would be the primary basis by which future observance of the NSW road rules for traffic and parking (including not overstaying the maximum time limit in a No Parking zone) would be achieved. This measure alone, by removing the early arrivals traffic which currently blocks the school access road traffic queue for a period of up to 30 minutes before the official school finish time, would have a significant effect on reducing the future maximum extent of the school afternoon peak traffic queue, by 30%. This is based on observations that there were typically 11 cars parked in the No Parking zone, 20 minutes before the official school finish time.

In addition to the above, the following measures shall be implemented as part of a 'Green Travel Plan':

- . Promotions to support parent walking to school with children at least one day per week;
- . More facilities for students riding bikes to school;
- . More encouragement and support for carpooling.

These measures would also potentially achieve a further 5% proportional reduction in the afternoon peak pick up periods for the remaining future school access car travel and parking demand.

Further car travel management measures which would also effectively speed up the future operation of the school afternoon peak car line operations, which are proposed to be introduced by the school as part of a future green travel plan, are:

Doubling the number of traffic wardens who place the students into the cars.

Staggering the dismissal times into three for Kindergarten, Year 1- 2 and Year 3-6.

Utilising an app such as "Pik My Kid" (see attached info) which allows traffic wardens/teachers to see who is next in the queue and/or a visual representation of the line so that the children can be prepared to get in and depart quickly;

These measures would also potentially achieve a further 5% proportional reduction during the afternoon peak pick up periods for the remaining future school access car travel and parking demand.

### **My Revised Calculation based on Future School Traffic Management Principles**

Previously the assumed worst case growth % for the school traffic queue in Birriga Road was an 82% increase based on an increase in students from 550 to 1,000 but as we now know the current number of students at the time of the observations was 620, this means the proportional future increase is now +61.5% not +82%.

The actual current queuing situation in the afternoons is a maximum queue length of 32 vehicles, which represents 17 cars queued within the school access road and a further 15 cars queued within Birriga Road, in the area between the School Access Road and Banksia Road.

In an unrestrained situation with no change to parking restrictions and no school traffic management plan, with a 61.5% increase in the school enrolments the maximum queue would potentially increase by a further 19 cars to 51 vehicles.

However, with the proposed provision of school parent/carer commitments to comply with all NSW Road Rules and the proposed school 'Green Travel Plan' and related traffic management measures which are outlined in this letter, the following improvements to the future school car queuing would be achieved during the 15 minute peak school afternoon 'pick up' period.

- Future school parent/carer driver commitments to comply with NSW Road Rules which would further reduce the remaining school traffic queue length by 30%, from 51 to 36 cars.
- Future additional school green travel plan measures to support increased walking, cycling and car pooling would further reduce the remaining school traffic queue length by an additional 5%, from 36 to 34 cars.
- Additional measures to effectively speed up the future operation of the school afternoon peak car line operations, which would further reduce the remaining school traffic queue length by a further 5%, from 34 to 32 cars, which would be the same as the current maximum queuing of 32 cars.

With the implementation of the above recommended measures, the increase in the school student capacity of 61% will not result in any future increase in the school car queuing during the 15 minute peak school afternoon 'pick up' period.

In addition to the above measure, a number of additional measures are also available to further reduce the future afternoon school 'pick up' traffic queuing, which will require consideration by the relevant authorities, namely:

#### **Future provision of organised School Buses**

The most effective measure will be future organised school buses which would pick up from the school and drop at designated points so that parents could pick up away from the school eg four proposed pick up points are recommended at

- 1) Rose Bay/Vaucluse (north)
- 2) Randwick/Maroubra (south)
- 3) Bondi/Bronte (east) and
- 4) Alexandria (west).

The future bus services have been investigated by the school parents and will enable 200 future students to travel to and from the school by buses, and would also achieve an further 28% proportional reduction in the maximum school access and parking demand during the afternoon peak pick up period (IE when considering the affect of the significant proportion of after school care occurring for the school students, the actual number of the future school students who would be leaving the school at the main pick up time in the afternoons would be approximately 700 students out of a future school population of 1,000 enrolments, so potential bus travel for 200 students would have a 28% proportional reduction on the future school afternoon peak car travel demand.)

#### **Making the School Access Road (The Cutting) fully available to School Traffic**

A future proposal to make the school access road fully available to the school drop off and pick up car traffic (by allowing the school drop off and pick up car traffic to exit via the bus only roadway section) is also fully supported by the School and the school has formally requested to the State Transit Authority (Sydney Buses) to allow this usage for brief periods of the day during the main school student drop off and pick up times. This request has also been supported by Woollahra Council in the past.

To date the State Transit Authority (Sydney Buses) has not agreed to this request on the basis that it would potentially delay their peak hour bus operations.

However if implemented in the future this additional access for the school would provide a further small but significant benefit to the school access road traffic circulation potentially achieving a further small 5-10% reduction in the maximum school access road traffic queue length (by removing the need for cars to turn around in the cul de sac, which many cars cannot do as a single turn) as well as by potentially enabling the start point of the future school afternoon pick up traffic queue to be moved further forward by two car spaces approximately towards the current location of the cul de sac .

It should also be noted by the Council that this alternative access for the school car traffic (in particular during the afternoon school peak periods) as well as improving the school peak hour traffic operations, would also have benefits in improving other locality traffic operations at the other nearby intersections (such as at Victoria Road/Bellevue Road and Victoria Road/Birriga Road) as some of the future school egress traffic could effectively bypass these intersections, thereby potential also improving traffic conditions for other locality traffic in the area.

Yours sincerely



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