

Memo



To: Elizabeth Carpenter
From: Dean Brodie
CC: Katherine Tracey, Aaron Chandler
Date: 20 September 2017
Re: Proposed Inner West High School – Response to Authority Comments

Elizabeth

Further to the letters received from both the RMS and the NSW Department of Transport please find below additional information / comments in response to each. This information has been provided having regard to the face to face meetings we have had with representatives from both Transport for NSW (TfNSW) and the Roads and Maritime Services (RMS).

RMS Letter Dated 24 August 2017

Issue

- 1. A significant number of vehicles and pedestrians will access the site at the start and end of the school day. An assessment of the pedestrian impacts should be undertaken to assess the capacity of pedestrian facilities in the vicinity of the site to cope with the increase in students (ultimately 1,200-1,500 students).***

Response

Of note the end of the school day does not coincide with the typical bump our period of general businesses / commuters in the immediate area and thus would occur when spare capacity was available. It is also noted that the school proposes staggered start times to limit the total volume of pedestrians which may be exiting the school at any one time.

As discussed with TfNSW and the RMS the, we propose a pedestrian count at the intersection of Cleveland Street / Chalmers Street which will record both pedestrians whom cross these streets and mid-block volumes on each footpath on approach.

It is noted that as is the case with all traffic signals within the Sydney CBD, pedestrian phases are called every single cycle of the signals whether pedestrians have pressed the button or not. Therefore, the additional pedestrians through this intersection would have no impact on existing capacity or operation of these signals as the pedestrian phases are included in every cycle.

At complete of the pedestrian surveys and as agreed with the TfNSW and RMS we would undertake a Fruin Level of Service analysis of footpaths immediately surrounding the school site. This will consider origins of potential students having regard to surrounding residential catchments which are likely to be considered in the proposed zone boundary of the school.

Issue

- 2. Roads and Maritime requests that electronic copies of the Sidra intersection modelling undertaken for the Cleveland Street/Chalmers Street intersection is submitted for review and verification. The modelling should account for the peak pedestrian demand at the traffic signals for the ultimate student population.**

Response

As advised the SIDRA models are held by the previous traffic consultant who undertook the traffic report for the masterplan application (Thompson Stanbury & Associates) and they should be requested to provide the electronic copies of the SIDRA files to the RMS.

Issue

- 3. The survey data underpinning the mode share assumptions for the development, as set out in the Transport and Accessibility Impact Assessment Report (the traffic report), appears to include erroneous mode splits for one of the sites surveyed. Table 4 – JJ Cahill Memorial High School Mode of Travel Survey Results infers that a high proportion of students travel home by motorcycle and 'self-drive' (including students in years 7 – 10). This data should be reviewed and corrected where required.**

Table 5— South Sydney Secondary High School Mode of Travel Survey Results shows that almost 40% of students/staff travelled to school by private vehicle (car drop off plus self-drive) for the first survey result and 26% travelled to school by private vehicle for the second survey result. Table 3 - Sydney Secondary College Leichhardt Mode of Travel Survey Results shows the vast majority of teachers drive to work.

It is noted that it has been assumed that 12.5% of the additional 840 students will travel to school as a passenger by car and the additional car passenger trips have then been discounted by 50% on the assumption that half of the trips would be linked with existing commuter trips. This discount is likely to significantly understate the likely total private vehicle trips to the site associated with the additional 840 students. These assumptions should be reconsidered as this does not provide a conservative assessment of the additional trips on the surrounding network.

Response

The purpose of the mode of transport surveys of other schools in the inner west area was to provide a cross sectional analysis of travel characteristics of a range of schools which had access to a range of public transport options.

The statements above do not consider the availability of on-street parking the other schools which is not available at the proposed school which in turn would deter travel by private vehicle mode. This deterrent is reflective in the adopted mode of travel assumptions in the traffic report.

Of note, there are no traffic generation rates provided by the RMS for educational facilities in either the RTA Guide to Traffic Generating Facilities or Technical Direction 2013 / 04a.

The information on mode of travel was provided independently by each school. The error in motorcycle proportion of JJ Cahill School is noted and the corrected tables are detailed below:

Table 1 - JJ Cahill Corrected Mode of Travel Share To School

YEAR	How did you travel to school today?									
	BOARDER	TRAIN	SELF DRIVE	CAR DROP OFF	MOTOR CYCLE	BUS	WALK	BICYCLE	FERRY	OTHER
Year 7	0%	2%	0%	36%	0%	14%	48%	0%	0%	0%
Year 8	0%	0%	0%	8%	0%	31%	62%	0%	0%	0%
Year 9	0%	3%	0%	37%	0%	18%	39%	3%	0%	0%
Year 10	0%	8%	0%	18%	0%	21%	51%	3%	0%	0%
AVG	0%	3%	0%	25%	0%	21%	50%	1%	0%	0%
Staff	0%	6%	0%	16%	0%	26%	52%	0%	0%	0%

Table 2 - JJ Cahill Corrected Mode of Travel Share From School

YEAR	How did you travel to school today?									
	BOARDER	TRAIN	SELF DRIVE	CAR DROP OFF	MOTOR CYCLE	BUS	WALK	BICYCLE	FERRY	OTHER
Year 7	0%	2%	0%	22%	0%	17%	59%	0%	0%	0%
Year 8	0%	0%	0%	0%	0%	38%	62%	0%	0%	0%
Year 9	0%	3%	0%	29%	0%	26%	39%	3%	0%	0%
Year 10	0%	8%	0%	15%	0%	15%	59%	3%	0%	0%
AVG	0%	3%	0%	17%	0%	24%	55%	1%	0%	0%
Staff	0%	13%	0%	13%	0%	25%	50%	0%	0%	0%

Of note the JJ Cahill High School is not located within a reasonable walking distance to any railway stations as is the case for the proposed school. Further, the mode share to bus / walk for students was 63-92% depending on the year. The proposed school is anticipated to have an even higher mode share to non-private vehicle modes.

Overall, the estimated mode of travel characteristics of the new students (of not zoned within a short walking distance to the school) have been developed on a first principles basis and are considered reasonable. They have considered:

- Ease of access to significant volumes of public transport options
- Zoning of school within a short walking catchment to the school
- Protection of the on-street parking network from parent parking during morning / afternoon peak periods.

As discussed with the RMS it is our view that the adopted mode of travel proportions estimated for future students is sound based on the information provided above. As further discussed with the RMS at the mode of travel surveys were undertaken on schools which provide a cross section of transit accessibility to inform this study.

Issue

4. ***Concern is raised with regard to the proposed use of the existing loading zone/No Parking zone on the eastern side of Chalmers Street for the provision of a 'pick-up/drop off' zone. As the kerbside drop off would be on the driver's side of vehicles, students on the passenger side of vehicles would exit into traffic lanes. This arrangement presents significant pedestrian road safety concerns.***

Response

The above comment assumes that children would exit the vehicle via the passenger side of the vehicle which would not be supported by parents on safety grounds. It is expected that parents would instruct their children to exit the vehicle via the driver's side directly to the adjacent footpath for their safety.

As discussed with TfNSW / RMS the existing No Parking zone would provide an opportunity for parents to park and drop off / pick up children and extension of this No Parking zone to five (5) parking spaces (which would still allow the movement of goods to adjacent businesses) would be sufficient to accommodate the potential demands by car of 105 students.

That is, the five parking spaces would have the capacity to turn over each vehicle every 30 – 60 seconds for drop off and 60-120 seconds on pickup. The five space No Parking zone would therefore provide 300-600 parking opportunities for drop off and 150-300 parking opportunities for pick up. Thus, the available capacity would be more than sufficient for the conservatively estimated 105 students which may travel by car.

Issue

5. ***The proposed location of the main pedestrian gates opposite the 'pick-up/drop-off' location may encourage students to cross Chalmers Street mid-block directly, rather than using the existing crossing at the signalised intersection of Cleveland Street/Chalmers Street. The proposed pedestrian access gate locations should encourage students to use appropriate pedestrian facilities.***

As the proposed 'pick-up/drop-off' zone is located opposite the school, this may generate significant pedestrian crossing demand at the Cleveland Street/Chalmers Street intersection. This should be considered in the intersection modelling.

Response

The issue of capacity of the Cleveland Street / Chalmers Street intersection capacity having regard to increases in pedestrian volumes has been address above.

As is the case with children alighting vehicles on the safer (driver) side of vehicles in this potential zone, it is unlikely that parents / school administration would support such behaviour.

Further, the provision of the main pedestrian entrance to the school in Cleveland Street is not supported given the roads higher order role in the network compared with Chalmers Street.

It is recommended that as part of the Green Travel Plan appropriate access behaviour of the school is both highlighted and encouraged.

Issue

- 6. The proposed 'pick-up/drop-off' zone being on the departure of the signalised intersection of Cleveland Street/Chalmers Street has the potential to impact on bus operations and intersection efficiency. It is likely that parents/caregivers would queue at this location particularly at the end of the school day. If the capacity of the 'pick-up/drop off' zone is insufficient, this may lead to queuing through to the intersection of Cleveland Street/Chalmers Street and parking compliance issues on Chalmers Street.**

Once mode share assumptions and traffic generation has been verified, the capacity of the proposed 'pick-up/drop-off' zone should be assessed to demonstrate that it can cater for the demand associated with the ultimate student population of the school.

Response

On the basis that parents utilising such a zone on the eastern side of Chalmers Street caused a negative impact on traffic conditions, the zone should be removed. The development of the school is not predicated on the zone being available but the installation of such a zone would be a benefit to those students who travel as part of their parent commuter trip to the city.

Of note the afternoon school peak does not coincide with the road network peak.

The mode share assumptions of the report have been validated having regard to other schools in the area, the availability of public transport, the low parking provision of the school and the parking restrictions in the immediate area.

It is noted that the eastern side of Chalmers Street already includes a two (2) vehicle No Parking zone which allows the dropping off / picking of passengers. On the basis, this was extended to accommodate a total of 5 vehicles, at an average of 30 seconds per vehicle, this would equate to a total of 600 parking opportunities available over an hour.

This would more than cater for the potential 105 students who travel by car / picked up in the morning / afternoon periods. It should also be noted that more than one student per vehicle is possible which would further reduce the number of overall vehicles dropping off / picking up passengers.

Issue

- 7. Surrounding businesses should be consulted in relation to the proposed 'pick-up/drop-off' zone and the loss of any allocated loading zones**

Response

Agreed

Issue

8. ***The EIS and traffic report should identify any infrastructure improvements proposed to mitigate potential safety and efficiency impacts as a result of the proposed development (i.e. upgrades to pedestrian facilities and measures to corral pedestrians to appropriate crossing locations).***

Response

The traffic report confirms that no improvement to traffic infrastructure is necessary to accommodate the development. Further, the traffic report prepared by the approved Masterplan (assessed by the RMS) also confirmed that no road network infrastructure improvements are necessary.

As also stated above the traffic signals at the intersection of Cleveland Street / Chalmers Street already include pedestrian phases triggered every cycle and thus additional volumes of pedestrians would not result in further loss of green time for general traffic.

The pedestrian Level of Service would be assessed as part of the Fruin analysis as agreed with TfNSW / RMS.

Issue

9. ***The proposed use of existing public bus zones/lanes for school buses for special events may have adverse impacts on public bus services. Transport for NSW should be consulted in this regard.***

Response

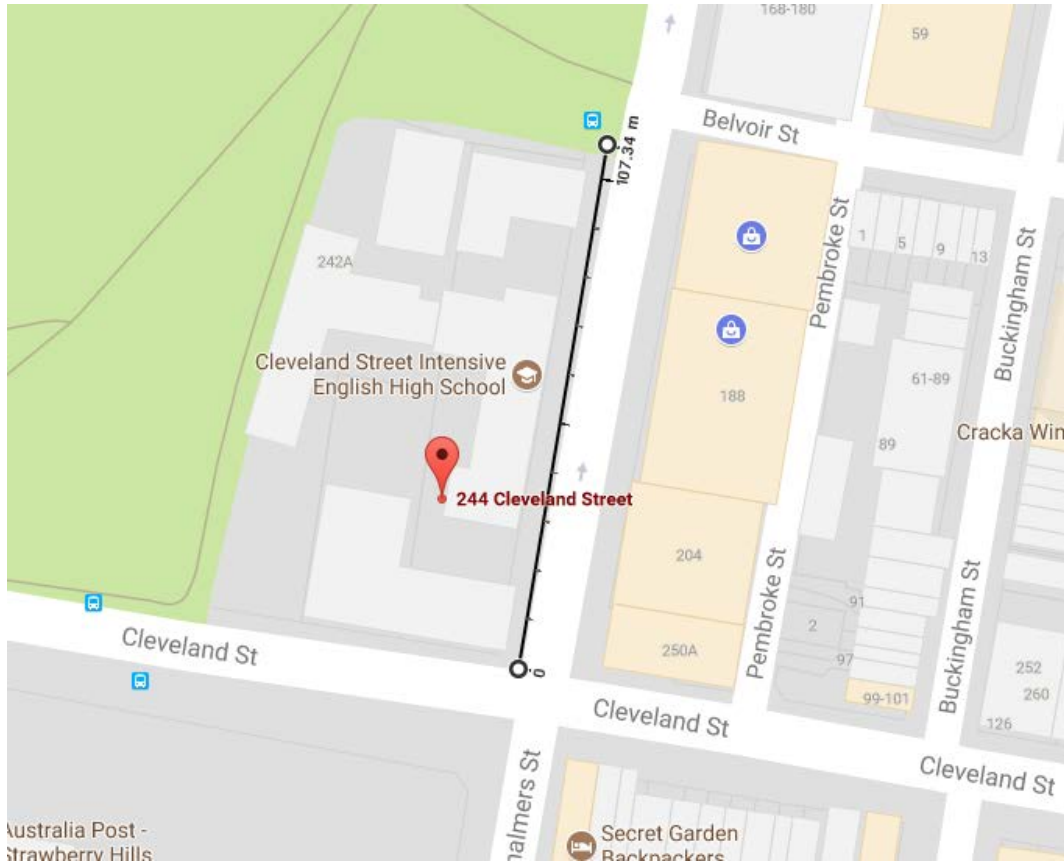
As discussed and in principle agreed with representatives of TfNSW, the school would provide a No Stopping Zone as per those which have been installed in other areas of the Sydney CBD. These signs are installed below.



The two (2) bus zones would be located adjacent to the existing bus zone / shelter some 100m north of the existing traffic signals.

The location is shown below:

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Issue

10. Section 4.3 of the EIS discusses clauses of SEPP Infrastructure 2007 (ISEPP) applicable to the development site, however omits Clause 101 and 102 of ISEPP. Clause 101 of ISEPP states:

"(2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that:

- a. where practicable, vehicular access to the land is provided by a road other than the classified road, and**
- b. the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development...and**
- c. the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road."**

The EIS and traffic report should address clauses 101 and 102 of ISEPP, and provide details on how these requirements have been considered and addressed.

Response

Both the traffic report prepared for the approved masterplan and the development application have fully assessed and confirmed that the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development.

On the matter of vehicular access, the site is landlocked by two classified roads and a park and as such vehicle access cannot be denied from at least one frontage road. The access from the classified road (Cleveland Street) only serves a small car parking area.

Issue

11. ***Details of the number of anticipated daily service vehicle movements associated with the operation of the school should be provided (including tuck-shop, grounds keeping, waste removal, stationery supplies and other deliveries).***

Response

Servicing is expected to be confirmed to waste by a Medium Rigid Truck and food deliveries / toilet servicing by vans utilising the small existing car park. Turning path analysis confirms there is sufficient manoeuvring area for a waste vehicle to enter and leave in a forward direction after accessing the loading dock space.

In regard to the frequency this number is not known but for example waste servicing is expected to occur outside school operating periods and this could form a condition of consent.

Issue

12. ***The proposed vehicular access shall allow all vehicles to be accommodated on site before being required to stop. Any security gate will need to be recessed such that the largest vehicle can be contained wholly on site before being required to stop in order to prevent queueing onto the footpath of Cleveland Street.***

Response

The gate to the small car park off Cleveland Street would remain open during most hours of the day and only close during late afternoon /evening periods where no vehicle traffic would be generated to or from the school.

As discussed with TfNSW / RMS the location of the gate would be recessed into the driveway to the southern edge of the car park aisle and would swing towards the building. This position would allow up to a MRV to wait inside the property in the event the gate was closed.

Issue

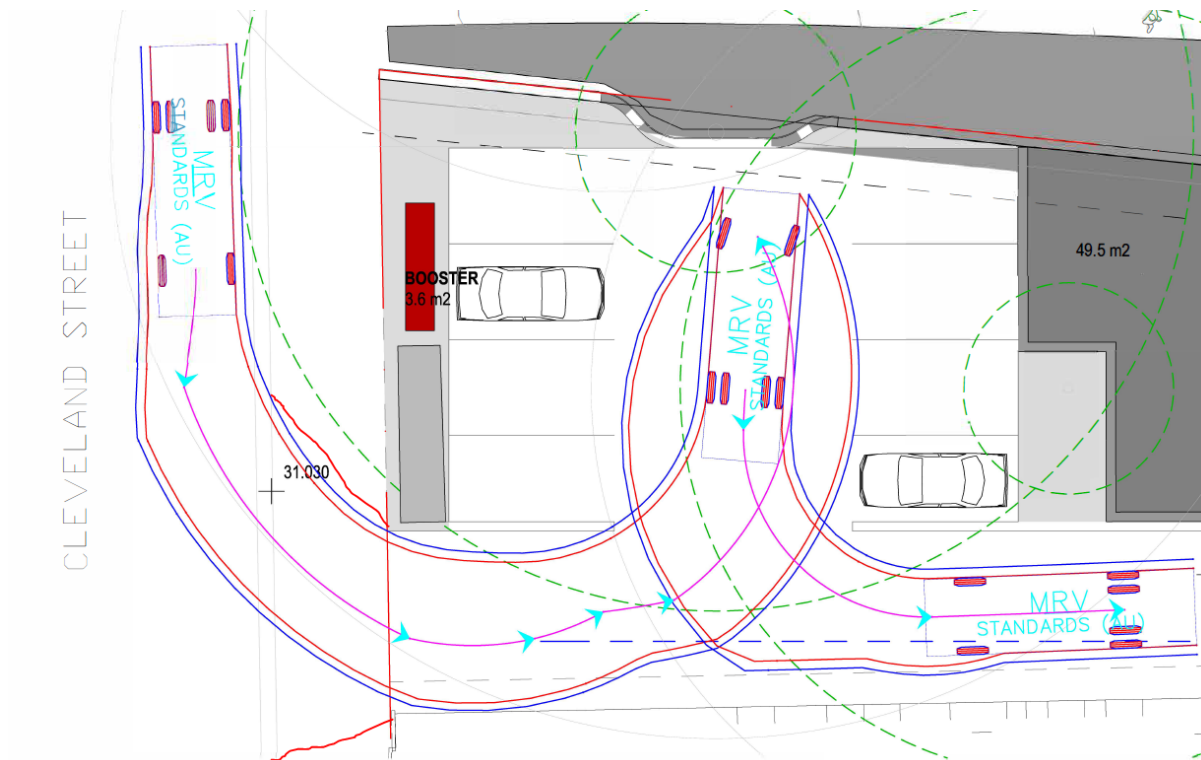
13. ***The swept path of the longest vehicle (including garbage trucks, maintenance and delivery vehicles) entering and exiting the subject site, as well as manoeuvrability through the site to loading areas, is to be in accordance with Austroads requirements.***

The vehicle swept path plan provided does not show detail of the vehicle crossover on Cleveland Street. The swept path plan should be amended to show detail of the crossover and driveway to demonstrate that the largest design vehicle can enter and exit the site in a forward direction, and manoeuvre to loading areas. Should any driveway adjustment works be required, this should be identified in the plans and submitted for Roads and Maritime's review.

It should be noted that any works on Cleveland Street will require the concurrence of Roads and Maritime under Section 138 of the Roads Act 1993.

Response

The turn path presented in Appendix B of the report needs to include the driveway 'wings' either side of accommodate the turn path as shown below:



Issue

14. ***It is noted that service vehicles will undertake reverse movements in the general car parking areas. Pedestrian facilities should be provided within car parking areas to provide safe passage for pedestrians to the school from car parking spaces to eliminate potential pedestrian conflicts with heavy vehicles as far as practical (particularly for pedestrians with a mobility impairment).***

Response

The small car park will only include one visitor spaces with the remaining spaces staff. All waste servicing would occur outside school operating periods and should be considered as a condition of consent. The small length to reverse does not warrant a separate pathway in an area only access by staff and the occasional visitor.

Issue

15. ***Parking provision should be in accordance with Council's requirements and AS2890.1- 2004, AS2890.6-2009 and AS2890.2 — 2002 for heavy vehicle usage.***

Response

As confirmed in the traffic report the car park design complies with the requirements of AS2890.1 and the assessment of the turning path has been based on the expected largest vehicle to access the site as per the requirements of AS2890.2.

Issue

16. Consideration should be given to whether the one on-site accessible car parking space proposed will be sufficient for a school accommodating up to 1,200 students and up to 100 staff. This is likely to be inadequate.

Response

The site is located a short walking distance to Australia's largest rail station, future light rail, local / regional bus routes and has a surrounding road network heavily protected with parking restrictions. It is expected the combination of significant public transport options and protection from all day parking will result in significantly high levels of public transport use. Travel by private vehicle would be minimal.

Issue

17. ***Careful consideration should be given to ensuring that landscaping and fencing does not restrict driver sightlines to pedestrians and other road users, both within the car park and on the frontage roads.***

Response

Agreed

Issue

18. ***A Construction Traffic Management Plan (CTMP) should be prepared in consultation with TfNSW Sydney Coordination Office, City of Sydney Council and Roads and Maritime.***

Response

Agreed and should form a condition of consent as part of the preparation of the Construction Certificate once construction methods have been finalised.

Issue

19. ***All buildings and structures, together with any improvements integral to the future use of the site are to be wholly within the freehold property (unlimited in height or depth), along the Cleveland Street boundary.***

Response

Agreed

Transport for NSW Letter

Issue

Recommendation

It is requested that the applicant needs to prepare a Transport and Pedestrian Management Plan (TPMP) in consultation with the Sydney Coordination Office within TfNSW, Roads and Maritime Services and the City of Sydney. The TPMP needs to include the following:

- ***Proposed pick up and drop off sites - Details of locations where coaches would be able to pick up and drop off students for excursions and sporting activities during the hours of bus lane operating along Chalmers Street;***
- ***Proposed drop off/ pick up zones in the vicinity of the school - The applicant needs to undertake traffic surveys at similar sites and justify that the proposed pick up and drop off zone is adequate to cater for the estimated movements for pick up and drop off activities; and***
- ***Detailed pedestrian analysis - A detailed pedestrian analysis should be undertaken whether the applicant needs to consider management measures such as staggered school start and finish times to ensure the students and staff would be able to access and leave the site in a safe and efficient manner during school start and finish periods.***

Response

This will require estimates of the volume of students who may be needing bus travel at any one time and surveys of another school?

Some of the information above regarding the operational characteristics of the school are unknown and should form a condition of consent.

The pedestrian surveys described above in the RMS letter response would go some way in populating the TPMP report. Overall again it should form a condition of consent.

We can confirm that High Range Analytics have been commissioned to prepare a Green Travel Plan for the school which will be made available within 4 -5 weeks of this response and this would include both upfront and ongoing management requirements for implementation of the plan.

Issue

Recommendation

TfNSW requests that the applicant be conditioned to the following:

- ***Prepare a Construction Pedestrian and Traffic Management Plan (CPTMP) in consultation with the Sydney Coordination Office within TfNSW. The CPTMP needs to specify, but not limited to, the following:***
 - ***Location of the proposed work zone noting that Chalmers Street and Cleveland Street may not be suitable due to the impact on buses and general traffic;***
 - ***Haulage routes;***
 - ***Construction vehicle access arrangements;***
 - ***Proposed construction hours;***
 - ***Estimated number of construction vehicle movements;***
 - ***Construction program;***
 - ***Consultation strategy for liaison with surrounding stakeholders;***
 - ***Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicles during the construction of the proposed works;***
 - ***Cumulative construction impacts of projects including Sydney Light Rail Project and Sydney Metro City & Southwest. Existing CPTMPs for developments within or around the development site should be referenced in the CPTMP to ensure that coordination of work activities are managed to minimise impacts on the CBD road network;***

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- *Should any impacts be identified, the duration of the impacts and measures proposed to mitigate any associated general traffic, public transport, pedestrian and cyclist impacts should be clearly identified and included in the CPTMP; and*
- *Submit a copy of the final plan to the Coordinator General, Sydney Coordination Office for endorsement, prior to the commencement of any work.*
- *The applicant shall provide the builder's direct contact number to small businesses adjoining or impacted by the construction work and the Transport Management Centre and Sydney Coordination Office within Transport for NSW to resolve issues relating to traffic, freight, servicing and pedestrian access during construction in real time. The applicant is responsible for ensuring the builder's direct contact number is current during any stage of construction.*

Response

Agreed and noted and should form part of the CC application.

Issue

Table 4 of the Traffic Report that includes travel survey results for JJ Cahill Memorial High School, Mascot, reports year 7-9 students as vehicle drivers and motor cycle riders. These students are not allowed to either drive a car or ride a motor cycle legally.

Response

See response above on this issue.

I look forward to discussing further once you have reviewed the above.

Yours sincerely



DEAN BRODIE

Managing Director