

22 April 2021



Tina Tang
Jattca
Suite 101, Level 1
343 George Street
Sydney
NSW 2000

Dear Tina

1. SSD10421 – Proposed Weigall Sports Complex – Response to Traffic Engineering Submissions

We have prepared this letter to address comments relating to parking and traffic engineering received from Woollahra Municipal Council, City of Sydney Council and the Department of Planning, Industry and Environment in relation to the subject projects.

The comments received are provided in the following correspondence:

- Woollahra Municipal Council – Letter Dated 16 December 2020
- City of Sydney Council – Letter Dated 30 November 2020
- Department of Planning, Industry and Environment – Email dated 30 March 2021

For ease of reference, each comment is presented in italics followed by our response.

1.1 Woollahra Municipal Council Comments

Car Parking Provision

1) Inconsistent/ambiguous information has been provided regarding number of players and spectator players in Figure 21, 22 and Figure 24, 25;

It is unclear what inconsistencies are referred to; however further response is provided to the following two points.

2) It is claimed that basketball functions will not generate additional parking demand, as these participants should already be on-site. While this conclusion is agreed upon, it should be noted that, basketball functions take place between 1:30pm and 2:30pm, before which participants for previous sessions are all calculated as "leave the site 30 minutes after the session", except for several students staying for multiple games. Therefore, the on-site students should be increased to include those who don't stay for another session but rather attend the later basketball function, as well as the accompanying spectators;

This was not presented in the TIA, however we note that the Functions described in the occupancy tables are only held for the winning teams on a few occasions throughout the year in that they only attract players from the preceding game. In this regard, the players (and associated spectators) from the earlier games do not stay and wait for the Function, which matches the parking demand profile presented in the TIA. This

was not clearly set out in the TIA report; however, the calculations and parking demand figures presented the TIA are correct and still apply.

3) It is understood that community use of the proposed facilities remain unclear, and that these users would not have access to car park in Building 2/Car Park Building. It should be noted that these users will require parking spaces, and without on-site provision, an increased demand for kerbside parking would occur. Traffic Section raises concerns on these parking demand in the surrounding area, where high occupancy rate of parking spaces are witnessed.

Community use will be managed (by prior arrangement only) and limited to local groups within walking distance of the site (on presentation of proof of address) and organisations that can provide transportation by coaches / shuttle buses.

Through consultation with the School, a community use schedule has been developed to define hours of possible use and user groups for which the complex will be available (refer to the letter responding to Item 3 – Community Use).

The schedule and the local aspect of the community uses have been specifically tailored to limit the use of private vehicles. Therefore, community use is expected to have minimal impact on the local on-street parking.

Small Car Parking & Accessible Parking

It is noticed that small car and accessible parking spaces are proposed. Further assessment will be made upon revised parking analysis. It should be noted that, small car parking spaces must not exceed 5% of the overall number of parking spaces, as per E1.9.6 of Council's DCP, and provision of accessible park should comply with D3.5 of Building Code of Australia.

The car park will accommodate 102 parking spaces including two accessible spaces.

Three small parking spaces are proposed, which represents 3% of the total provision.

Drop-off / Pick-up Queue Analysis

While Traffic Section in principle agrees with the assumed mode splits, average service time and duration of pick-up/drop off period, a more quantifiable queuing analysis should be submitted to demonstrate the proposed on-site pick-up/drop-off circulation area can accommodate 98th percentile queue at peak traffic levels. It should be noted that vehicles must not wait on the footpath or roadway.

In addition to the car park, the proposal includes a drop-off / pick-up area adjacent to the proposed building, having access from Neild Avenue. The drop-off / pick-up area will accommodate six vehicles at the same time. We have undertaken a Poisson Distribution analysis of the area using the peak Wednesday evening demand figures (adopting Council's calculated figures) and the typical average dwell time recorded at schools as a suitable benchmark.

Inputs			Outputs		
Total Arriving	190	Cars	Probability of queue	6.45%	
Time Period	30.0	Mins	Average length of queue	0.14	Cars
Arrival Time	9.5	Seconds/Car	95th percentile queue	0	Cars
Service Time	30.0	Seconds/Car	Average time in system	31.29	Seconds/Car
No. of Services (N)	6	Spaces	Average time in queue	1.29	

Approximate, double check table

The results indicate that adopting a 30-minute pick-up period and applying the 190 vehicles within this period (this ignores cars arriving outside the 30 minute period and therefore presents a robust assessment) there would be no queue (95th percentile) and a 6.45% of any queue.

Extending the pick-up period to a more realistic 45 minutes reduces this probability to 0.81% chance of a queue.

Operational Traffic Management Plan

Pursuant to E1.13.1 of Council's DCP, an OTMP is required for education facilities under Clause 104 and Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007 or classified as designated development under S.77A of the EP&A 1979, which should be submitted along with the proposal for assessment prior to consent, as per E1.13.1 of Council's DCP.

We note the comments and would accept a condition of consent requiring the provision of an OTMP prior to the Occupation Certificate. An outline of the proposed operation has been described in the TIA, which presents the methods by which students will be transported to and from the facility. In this regard, Council can be satisfied that the SSDA proposal is able to function safely and with limited impact.

From a planning and timing perspective, it is more appropriate that the requirement for an OTMP be incorporated into a consent condition so that the OTMP can be prepared nearer the time of its implementation (i.e. the management strategies that rely on staff at the time of operation) and enable input from stakeholders.

Bicycle Parking

For weekday operations, Traffic Section does not agree to the statement made in the traffic report that no bicycle parking will be required, as only 30 percent of students are calculated as being picked up and dropped off by private vehicles, it is envisaged that some students will access the subject site for before and after school activities using bicycles, especially some students are from senior school, who are more than capable of riding bicycles with required sports facilities. It is however acknowledged that from above calculations, the post-development bicycle parking demand can be accommodated on-site by the proposed parking provision.

Noted.

For weekend operations, bicycle generating rate is adopted as 1 per 15 visitors, as per DCP's minimum requirement for indoor recreational facilities. No GFA is provided for the proposed swimming pool area. Even without parking demand for swimming pools, a total of 26 bicycle parking spaces is calculated for weekend operations. Furthermore, 20-39 bicycle parking demand for visitors, as well as 1-2 staff bicycle parking demand is calculated in the traffic report. It should be noted that the lower limit is calculated by using the lowest parking generation rate for all facilities, the actual parking demand would, therefore, be higher than 20 spaces. The proposed bicycle parking provision of 20 spaces for visitors and 2 spaces for staff will result in an undersupply than actual demand.

The reference to bike parking in the TIA refers to double sided bike racks, therefore the 20 racks cater for 40 bikes, which satisfies the maximum demand.

Local Area Traffic Management Plan

It should also be noted traffic report suggests 10% of students will walk to and from the site, and with children from preparatory school required to walk past the vehicular crossing of White City and use the shared vehicular/pedestrian crossing for Building 2 to wait for pick-ups, safety concerns are raised for pedestrian movements near the school premises.

As such, a Local Area Traffic Management (LATM) should be developed, funded and implemented, to the satisfaction of the Council's Engineering Services Department, and the applicant should make best endeavours to consult with the local schools and community members in the preparation of the LATM.

Applicant should also liaise with White City immediately adjacent to the subject site in the development and implementation of LATM.

We have contacted Council to begin discussions to agree on what form of LATM measures are suitable and whether these align with the LATM prepared by the White City development team.

Green Travel Plan

A Green Travel Plan (GTP) is submitted for the proposed development, as per E1.12.1 of Council's DCP. While Traffic Section finds the approaches to develop GTP and the initiatives listed generally reasonable and consistent with Council's overarching strategies to pursue alternative transport modes, it should be noted that current GTP focuses more on the physical conditions, active transport availability and principles of the plan, more quantifiable targets should also be provided, as well as more effective measures be developed to ensure these targets are achieved, especially regarding promoting alternative transport modes for staff/trainers, given they are currently assumed to predominantly use private vehicles.

As such, a revised GTP should be submitted to provide information including but not limited to:

- 1) Quantifiable targets of plan for different groups, including students and staff/trainers;*
- 2) Strategies, measures and actions that are practical, effective and compatible with the targets;*
- 3) Implementation of plan and representative responsible for implementing and enforcing the plan.*

Should the development be approved, monitoring annual reports would be required to provide information on the number of people trips, travel modes by time of day, journey purpose and origin/destination of trips for a minimum of 5 years post occupation, as per Council's DCP.

We note the comments made and will revise the GTP accordingly. It should be noted that the GTP prepared for submission with the application as a framework document (to ensure that any physical requirements are included within the building design). We would suggest that the comments from Council are incorporated into a consent condition so that the GTP can be updated nearer the time of its implementation (i.e. the management strategies that rely on staff at the time of operation).

Construction Traffic Management Plan (CTMP)

Preliminary assessment of the CTMP identifies the following issues that need amendment/clarification:

- 1) Hours of work: It is understood that all construction vehicle movements will be restricted on school days between 8:00am-9:30am and 2:30-4:00pm, however it should be noted that after school training ends around 5:00pm, where shuttle buses and pick-ups would also occur on the proposed construction vehicle routes. Applicant should coordinate to ensure construction vehicles movements are also restricted in that time period;*
- 2) Access and egress route of construction vehicles: Restricted manoeuvres are identified in the swept path analysis on site and at roundabout of Lawson and Vialoux Avenue. It should be noted that Vialoux entrance is relatively narrow with vehicles constantly parking on the side;*
- 3) Cumulative effects with White City Development: With another significant development taking place in the adjacent area, it is essential that applicant liaise with White City regarding in order to minimise the cumulative traffic and parking impacts of the developments;*
- 4) Parking spaces near Entrance: It is proposed that a no parking zone should be installed in front of Vialoux Avenue access point, and one (1) 2P parking space should be temporarily removed to accommodate the construction vehicle movements, which will affect six (6) parking spaces. Application to the changes must be lodged by the applicant. This application process is subject to community consultation and approval by local traffic committee.*

We note the comments and will revise the CTMP accordingly. This is best done when a contractor has been engaged and following the completion of the consent conditions so that work hours, truck routes and other measures nominated in the condition can be applied for and incorporated.

1.2 City of Sydney Council Comments

We have reviewed the letter from CoS dated 20 November and there are no comments relating to parking or traffic engineering. We note comment 8 in relation to the waste management timing and would incorporate the recommended condition within the OTMP requested by WMC.

1.3 Department of Planning, Industry and Environment

4. Respond to concerns raised in public submissions about: the loss of 6 existing on-street car parking spaces.

There is the potential to reduce the effect on parking at Vialoux Avenue, which can be further investigated at the time of preparing the final CTMP. A point to consider is that there are trees outside the property which should be avoided. It is also noted that the Vialoux Avenue is a cul-de-sac and that the current parking arrangement restricts U-turning manoeuvres. In any case, the project is happy to work with Council and the community to minimise the impact on on-street parking.

5. Provide an assessment of likely / predicted construction traffic generation (excavated and imported soil, demolished materials, and new materials to/from the site) and consideration of impact on the local road network.

Bulk Excavation Stage

This stage of construction will involve earthworks and minor demolition items removal during a 6 - 8 week period. The maximum sized truck to be utilised throughout this stage will be a medium rigid vehicle (up to 8.8m long). It is proposed that all bulk excavation works occur within the site, with construction vehicle access provided in the following manner:

- a) Building One – from Vialoux Avenue through the site exiting onto Neild Avenue.
- b) Building Two – from Vialoux Avenue through the site exiting onto Alma Street.

The principal area of excavation and demolition is Building One. As the carpark is built without a basement there will be minimal excavation on this site. This stage will have a maximum of 40 trucks per day (40 in, 40 out), which equates to a maximum of two (2) truck movements every 15 minutes. It should be noted that this truck movement is anticipated to occur over a 6 - 8 week period and as such, considered moderate and will have minimal impacts on the surrounding intersections and road network around SGS.

Construction Stage

This stage of construction will involve construction works including concrete pours, steel frame installation, wall panelling and roof sheeting during the following time periods:

- a) Building One – a 22 – 24 month period.
- b) Building Two – a 6 – 8 month period

The maximum sized truck to be utilised throughout this stage will be a medium rigid vehicle (up to 8.8m long). It is proposed that all construction works occur within the site, with construction vehicle access provided in the following manner

- c) Building One – from Vialoux Avenue through the site exiting onto Neild Avenue.

d) Building Two – from Vialoux Avenue through the site exiting onto Alma Street.

This stage will have a maximum of 10 trucks per day (10 in, 10 out), which equates to a maximum of two (2) truck movements every hour, noting that there will be restrictions on deliveries at school pick up and drop off times (8am to 9.30am and 2.30pm – 4pm on school days). This volume is therefore considered minor and will have negligible impacts on the surrounding intersections and road network around SGS.

We trust that this response assists with the assessment of the project and if any further clarification be required, please do not hesitate to contact me.

Yours faithfully



Kasia Balsam
Team Leader

Document Control: Prepared by *AM/KB* on *21 April 2021*. Reviewed by *AM* on *22 April 2021*.
