

20 April 2022

211530 TAAA

Jacobs  
Level 7, 177 Pacific Highway  
North Sydney NSW 2060

Attention: Pete Morrison

## **GLENWOOD HIGH SCHOOL**

### **Supplementary Response to Submissions - Traffic and Transport**

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Dear Pete,

In response to the Request for Additional Information provided by the Department of Planning and Environment (DPE) dated 23 March 2022, we provide the following information for consideration. Comments are provided where they relate to individual government agencies. This information should be read in conjunction with TTW's Transport and Accessibility Impact Assessment (TAIA) dated 10 February 2022.

#### **Department of Planning and Environment (DPE)**

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##### Dedicated bicycle storage facilities for staff

DPE has noted that dedicated bicycle storage facilities for staff have not been proposed. In order to encourage staff bicycle usage, these facilities can be provided.

As per the TAIA, a total of 84 bicycle parking spaces (28 new bike parking spaces proposed with this SSDA) will be provided in accordance with NSW Department of Education *Educational Facilities Standards & Guidelines* (EFSG) requirements. The EFSG requirements do not specify a breakdown between staff and student facilities. In accordance with the NSW *Planning Guidelines for Walking and Cycling* it is recommended that bicycle storage for 5% of staff be provided. However, the short-term mode share target for staff cycling to the site (as per the Preliminary School Transport Plan submitted for the SSDA) is higher at 10%. As per the TAIA, it is anticipated that the School would operate with up to 133 staff, therefore a recommended provision of 13 bicycle parking spaces for staff.

We recommend that a minimum of 13 weather protected bicycle parking spaces be provided for staff (out of the 84 total spaces to be provided), and this could be included as a condition of consent if required. SINSW considers that these would be secure by nature of being within the school property, which is gated and secure. Staff bicycle parking spaces should be located close to the staff end-of-trip facilities (EOTF) and administration areas if possible.

We note that as demand grows for bicycle parking over time, such as towards the long-term staff target of 17% (23 spaces), extra storage could be provided through installation of additional U-rails. These are a relatively low cost and low impact item which could be installed at a later date, once demand requires it.

##### Adequacy of staff end-of-trip facilities

DPE has requested additional information on the adequacy of the proposed end-of-trip facilities.

In accordance with the NSW *Planning Guidelines for Walking and Cycling* it is recommended that 4 showers (2 male and 2 female), 2 change rooms (1 male and 1 female), and 1 locker per 3 bike racks be provided (for a facility with 50-149 staff). This would be 4 lockers for the proposed 13 staff bicycle spaces. This SSDA proposal provides the 4 showers as per the NSW guidance, which will include combined space for staff changing. The provision of 18 lockers substantially exceeds the NSW guidance. For the short-term mode targets of 10% or approximately 13 staff, estimated at approximately 7 male and 7 female staff, as well as the long-term mode targets of 17% or approximately 23 staff, estimated at approximately 11 male and 11 female staff, it is considered reasonable that these could be accommodated in 2 male and 2 female shower/change facilities across a typical morning or afternoon usage period.

On this basis, the proposed end-of-trip facilities are considered adequate.

## **Transport for NSW (TfNSW)**

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### Mode share

TfNSW notes that long-term improvements to drop-off and pick-up mode share (reduced) and cycling mode share (increased) could be achieved. While we agree that reductions in private vehicle usage are the aim of the project's transport strategy, we do not consider that changing the targets at this time would be beneficial to the project. Mode share split targets are by nature an estimate or goal only and will need to be revised over time as the School Transport Plan is implemented and reviewed. Nevertheless, we note that a mode split of 5% bicycle usage by students would be mostly accommodated on the site, given a provision of at least 71 bicycle spaces (total of 84 minus 13 for staff) for 1,820 students (3.9%). If on implementation of the School Transport Plan an uptake in bicycle usage (as an example) is achieved, then the revised targets should reflect more ambitious or continued activity in that area. Alternatively, other modes may see more success and the School Transport Plan should adjust to reflect that.

We also note that the mode share targets submitted in the revised TAIA for the Response to Submissions (i.e. the most recent revision) were updated to match targets proposed by TfNSW in its original submission.

### Pedestrian infrastructure

TfNSW notes that a high priority has been put on pedestrian upgrades for this development. We assume that TfNSW refers to Section 5.3.2 of the TAIA which states that "active transport is a higher priority mode than all other non-emergency movements." In terms of proposed pedestrian infrastructure upgrades, this comprises of modifications to the existing footpath and fence to service the new pedestrian entry on Glenwood Park Drive, as per the TAIA and the architectural Public Domain Plan (DA-AR-0024).

We note that the TAIA provided a gap analysis of the local pedestrian network (refer Section 2.6.1 and Figure 2.15); this analysis was included for information only and the missing connections are not proposed to be modified. These works are within Council's public domain and not substantially affected by the proposal.

### Monitoring and review

TfNSW recommends that the School Transport Plan is monitored and reviewed every 12 months to test the performance and efficacy of the STP. As per Section 5.6.2 of the TAIA, we have recommended that a review every two years would be appropriate after an initial review following six months of operation. A 12-month review period could be put forward as a condition of development consent if required.

### End-of-trip facilities (EOTF)

TfNSW recommends provision of sheltered and secure bike racks to encourage more staff and students to use bikes. We propose that bicycle parking for staff (minimum 13 spaces as detailed above) will be provided undercover, and this could be included as a condition of development consent if required. Bicycle parking for students (minimum 71 spaces) is currently proposed outdoors. We note that the provision of undercover

spaces can be investigated during the detailed design phase which may result in bicycle storage locations differing from those shown on the submitted architectural plans or shelter being provided to the current locations, however would not alter the nature of the development. All bicycle parking on-site is considered secure in nature by SINSW, by being provided within the school site. Bicycle parking use will be reviewed as part of the monitoring and review process associated with the STP (and can be reviewed informally at any time) and will be promoted in the Implementation Strategy.

TfNSW also notes that consideration should be given to a higher number of lockers for staff (currently 18 lockers proposed). In the NSW *Planning Guidelines for Walking and Cycling* it is recommended that lockers be provided at a rate of 1 space per 3 racks, which would be the equivalent of approximately 4 lockers for staff (based on the 13 dedicated racks which will be available). 18 lockers are considered sufficient for the proposed provision and would exceed short-term targets and substantially exceed the NSW guidelines. Additional lockers could be installed at a later date if required by increased demand.

### Travel Access Guide

TfNSW notes that a customised Travel Access Guide for the school, rather than a generic template, should be provided. The template shown in the TAIA was for illustrative purposes only, and a customised document would be provided in the final School Transport Plan. This is a planned part of future documentation and could be included as a condition of development consent if required.

### Implementation plan

TfNSW recommends that the Implementation Plan section of the STP should hold all of the information about initiatives, to simplify the process of delegation and implementation. These comments will be considered in the preparation of the final STP post-approval.

### Travel survey

TfNSW recommends that a proposed Travel Survey be included as an appendix to the STP, for distribution in the first (and subsequent) review post-occupancy. This will be considered in the preparation of the final STP.

## **Blacktown City Council (BCC)**

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### Car parking capacity

BCC has expressed concern that the provision of only 93 on-site car parking spaces means that the School will be relying on on-street parking to meet demand and will put pressure onto nearby on-street parking, as the school is isolated and not frequently serviced by public transport.

It should be noted that provision for on-site parking by students is not considered in any way for this development. As per Department of Education policy, a school is not obliged to provide parking on site to anyone at any time, and this is particularly the case for students. For any small number of senior students who may wish to drive (which is discouraged under this development's transport strategy), they must do so independently.

For staff, as detailed in the TAIA the proposed 93 spaces would allow for 0.70 spaces per staff member, i.e. 70% of staff could drive and park on-site. The current mode share for staff is 92% as car driver, which at the current school population is approximately 97 spaces (i.e. negligible usage of on-street parking). The short- and long-term travel targets seek to reduce this rate to 80% and 68% respectively. This gradual reduction in car parking usage should offset the gradual growth in student and staff population over time. At the long-term rate of 68%, all staff car parking demand would be met within the on-site car park.

If any usage of on-street parking should occur, the TAIA has shown that the local street network could accommodate substantial increases in on-street parking usage. Average available capacity is 208 spaces and the minimum observed spare capacity is 179 spaces, within the surrounding assessed areas. In a worst-case and full-capacity scenario as described in the TAIA, only 58 additional vehicles could be expected as a result of the proposed development, which could be comfortably accommodated and would not put pressure onto nearby on-street parking.

Should you require anything further please contact the undersigned.

Yours faithfully,  
**TTW (NSW) PTY LTD**



**MICHAEL BABBAGE**  
**Associate (Traffic)**

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